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<211> 1239

<212> PRT

<213> Homo sapiens

<400> 4986

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<212> DNA

<213> Homo sapiens

<400> 4987

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<210> 4988
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<212> PRT
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<211> 54

<212> PRT

<213> Homo sapiens

<400> 4990

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Glu	Gln	Ala	Ser	Phe	Leu	Ala	Ser	Ser	Phe	Ser	Ser	Ser	Ala	Gly	Pro
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<210> 4991

<211> 828

<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 4994

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Glu	Glu	Asp	Ser	Asp	Gly	Glu	Leu	Asn	Thr	Trp	Glu	Leu	Ser	Glu	Gly
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Trp	Asp	Ser	Glu	Leu	Lys	Ala	Asp	Gln	Gly	Asn	Pro	Tyr	Asp	Ala	Asp
65				70				75				80			
Asp	Ile	Gln	Glu	Ser	Ile	Ser	Gln	Glu	Leu	Lys	Pro	Trp	Val	Cys	Cys
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Ala	Pro	Gln	Gly	Asp	Met	Ile	Tyr	Asp	Pro	Ser	Trp	His	His	Pro	Pro
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 <211> 1595
 <212> DNA
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<211> 217

<212> PRT

<213> Homo sapiens

<400> 4996

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Ile	Ser	Leu	Thr	Met	Asn	Ser	Lys	Leu	Leu	Asn	Gly	Ser	Gln	Arg	Val
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<210> 4997

<211> 1888

<212> DNA

<213> Homo sapiens

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 Thr Gly Arg Glu Val Ala Ile Lys Ile Ile Asp Lys Thr Gln Leu Asn
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 260 265 270
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<212> DNA
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<211> 307

<212> PRT

<213> Homo sapiens

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			20					25					30		
Arg	Glu	Ser	Asn	Val	Leu	His	Glu	Lys	Ser	Lys	Gly	Lys	Thr	Arg	Glu
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Lys	Ile	Pro	Glu	Asp	Ile	Leu	Lys	Glu	Val	Thr	Thr	Pro	Lys	Glu	Val
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<212> PRT

<213> Homo sapiens

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<212> DNA

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<211> 642

<212> PRT

<213> Homo sapiens

<400> 5004

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Ser Gly Glu Lys Leu Lys Val Val Asn Glu Arg Ala Thr Leu Phe Arg
65      70      75      80
Ile Thr Ser Asn Ala Met Ile Asn Ala Cys Arg Asp Phe Leu Glu Leu
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Ala Glu Ile His Ser Arg Lys Trp Gln Arg Ala Leu Gln Tyr Glu Gln
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Glu Gln Arg Val His Leu Glu Glu Thr Ile Glu Gln Leu Ala Lys Gln
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Glu Asp Ser Glu Glu Asp Glu Asp Thr Glu Tyr Phe Asp Ala Met Glu
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Arg Lys Ala Glu Gly Ser Thr Gly Thr Ser Ser Val Asp Trp Ser Ser
195     200     205
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<212> DNA
<213> Homo sapiens
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<212> PRT

<213> Homo sapiens

<400> 5006

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Arg	Gly	Ser	Gly	His	Val	Thr	Val	Phe	Gly	Leu	Ser	Asn	Lys	Phe	Glu
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Ser	Glu	Phe	Pro	Ser	Ser	Leu	Thr	Gly	Lys	Val	Ala	Pro	Glu	Glu	Phe
	50				55					60					
Lys	Ala	Ser	Ile	Asn	Arg	Val	Asn	Ser	Cys	Leu	Lys	Lys	Asn	Leu	Pro
65				70					75					80	
Val	Asn	Val	Arg	Trp	Leu	Leu	Cys	Gly	Cys	Leu	Cys	Cys	Cys	Cys	Thr
			85					90					95		
Leu	Gly	Cys	Ser	Met	Trp	Pro	Val	Ile	Cys	Leu	Ser	Lys	Arg	Thr	Arg
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Arg	Ser	Ile	Glu	Lys	Leu	Leu	Glu	Trp	Glu	Asn	Asn	Arg	Leu	Tyr	His
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Lys	Leu	Cys	Leu	His	Trp	Arg	Leu	Ser	Lys	Arg	Lys	Cys	Glu	Thr	Asn
	130					135					140				
Asn	Met	Met	Glu	Tyr	Val	Ile	Leu	Ile	Glu	Phe	Leu	Pro	Lys	Thr	Pro
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<211> 487

<212> PRT

<213> Homo sapiens

<400> 5008

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			20					25					30		
Ser	Met	Ala	Lys	Ile	His	Ala	Arg	Asn	Gly	Asp	Leu	Ser	Glu	Ala	Ala
	35						40				45				
Met	Cys	Tyr	Ile	His	Ile	Ala	Ala	Leu	Ile	Ala	Glu	Tyr	Leu	Lys	Arg
	50				55					60					
Lys	Gly	Met	Phe	Ser	Met	Gly	Trp	Pro	Ala	Val	Leu	Ser	Ile	Thr	Pro
65				70					75					80	
Asn	Ile	Lys	Glu	Glu	Gly	Ala	Met	Lys	Glu	Asp	Ser	Gly	Met	Gln	Asp
			85					90					95		
Thr	Pro	Tyr	Asn	Glu	Asn	Ile	Leu	Val	Glu	Gln	Leu	Tyr	Met	Cys	Val
			100				105					110			
Glu	Phe	Leu	Trp	Lys	Ser	Glu	Arg	Tyr	Glu	Xaa	Ser	Leu	Leu	Met	Ser
	115					120					125				
Thr	Ser	Pro	Ser	Leu	Leu	Ser	Leu	Arg	Asn	Asn	Glu	Thr	Ser	Lys	Asn
	130				135				140						
Ser	Asp	Leu	Tyr	Tyr	Asp	Ile	His	Arg	Ser	Tyr	Leu	Lys	Val	Ala	Glu
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Lys Leu Tyr Ala Asp Lys Phe Gly Ala Asp Asn Val Lys Ile Ile Gln
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Asp Ser Asn Lys Val Asn Pro Lys Asp Leu Asp Pro Lys Tyr Ala Tyr
225                230                235                240
Ile Gln Val Thr Tyr Val Thr Pro Phe Phe Glu Glu Lys Glu Ile Glu
                245                250                255
Asp Arg Lys Thr Asp Phe Glu Met His His Asn Ile Asn Arg Phe Val
                260                265                270
Phe Glu Thr Pro Phe Thr Leu Ser Gly Lys Lys His Gly Gly Val Ala
                275                280                285
Glu Gln Cys Lys Arg Arg Thr Ile Leu Thr Thr Ser His Leu Phe Pro
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Tyr Val Lys Lys Arg Ile Gln Val Ile Ser Gln Ser Ser Thr Glu Leu
305                310                315                320
Asn Pro Ile Glu Val Ala Ile Asp Glu Met Ser Lys Lys Val Ser Glu
                325                330                335
Leu Asn Gln Leu Cys Thr Met Glu Glu Val Asp Met Ile Arg Leu Gln
                340                345                350
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                355                360                365
Ala Tyr Ala Arg Ala Phe Leu Glu Glu Thr Asn Ala Lys Lys Tyr Pro
                370                375                380
Asp Asn Gln Val Lys Leu Leu Lys Glu Ile Phe Arg Gln Phe Ala Asp
385                390                395                400
Ala Cys Gly Gln Ala Leu Asp Val Asn Glu Arg Leu Ile Lys Glu Asp
                405                410                415
Gln Leu Glu Tyr Gln Glu Glu Leu Arg Ser His Tyr Lys Asp Met Leu
                420                425                430
Ser Glu Leu Ser Thr Val Met Asn Glu Gln Leu Cys Arg Gly Pro Cys
                435                440                445
Leu Tyr Ser Phe Cys Ser Ser Val Ser Ser Ile Ser Leu Ser Thr Val
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<211> 426

<212> DNA

<213> Homo sapiens

<400> 5009

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<210> 5010

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<212> PRT

<213> Homo sapiens

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			20					25					30		
Asn	Leu	Pro	Gly	Arg	Val	His	Gln	Phe	Phe	Ile	Ser	Pro	Leu	Phe	Ile
		35				40						45			
Leu	Ser	Phe	Glu	Val	Ile	Leu	Ile	His	Phe	Leu	His	Leu	Gln	Pro	Pro
	50					55					60				
Val	Leu	Leu	Asp	Leu	Ala	Pro	Asn	Leu	Leu	Leu	Pro	Phe	Gly	Thr	Glu
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Glu	Lys	Leu	Leu	Ser	Ser	Pro	Cys	Phe	Ala	Asp	Ile	Ser	Lys	Gly	Lys
				85					90					95	
Glu	Ser	Thr	Gly	Pro	Phe	Ile	Ser	Cys	Pro	Arg	Pro	Ser	Gln	Gly	Ala
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Val	Ile	Met	Pro	Lys	Pro	Tyr									
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<210> 5011

<211> 3431

<212> DNA

<213> Homo sapiens

<400> 5011

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<211> 950

<212> PRT

<213> Homo sapiens

<400> 5012

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Lys Ile Pro Val Asp Ala Ser Lys Pro Asn Pro Asn Asp Val Glu Phe
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Asp Asn Leu Tyr Leu Asp Met Asn Gly Ile Ile His Pro Cys Thr His
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Pro Glu Asp Lys Pro Ala Pro Lys Asn Glu Asp Glu Met Met Val Ala
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Ile Phe Glu Tyr Ile Asp Arg Leu Phe Ser Ile Val Arg Pro Arg Arg
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Leu Leu Tyr Met Ala Ile Asp Gly Val Ala Pro Arg Val Lys Met Asn
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Gln Gln Arg Ser Arg Arg Phe Arg Ala Ile Lys Glu Gly Met Glu Ala
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Ala Val Glu Lys Gln Arg Val Arg Glu Glu Ile Leu Ala Lys Gly Gly
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Phe Leu Pro Pro Glu Glu Ile Lys Glu Arg Phe Asp Ser Asn Cys Ile
145          150          155          160
Thr Pro Gly Thr Glu Phe Met Asp Asn Leu Ala Lys Cys Leu Arg Tyr
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Tyr Ile Ala Asp Arg Leu Asn Asn Asp Pro Gly Trp Lys Asn Leu Thr
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Val Ile Leu Ser Asp Ala Ser Ala Pro Gly Glu Gly Glu His Lys Ile
195          200          205
Met Asp Tyr Ile Arg Arg Gln Arg Ala Gln Pro Asn His Asp Pro Asn
210          215          220
Thr His His Cys Leu Cys Gly Ala Asp Ala Asp Leu Ile Met Leu Gly
225          230          235          240
Leu Ala Thr His Glu Pro Asn Phe Thr Ile Ile Arg Glu Glu Phe Lys
245          250          255
Pro Asn Lys Pro Lys Pro Cys Gly Leu Cys Asn Gln Phe Gly His Glu
260          265          270
Val Lys Asp Cys Glu Gly Leu Pro Arg Glu Lys Lys Gly Lys His Asp
275          280          285
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 Leu Leu Arg Gly Gln Ala Gln Ile Pro Lys Leu Met Ser Asn Met Arg

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<212> DNA

<213> Homo sapiens

<400> 5013

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<211> 675

<212> PRT

<213> Homo sapiens

<400> 5014

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 35          40          45
Asp Arg Leu Arg Gln Arg Gly Leu Glu Gln Arg Cys Leu Arg Leu Ser
 50          55          60
Ala Arg Glu Ala Ser Glu Glu Glu Leu Gly Leu Val His Ser Pro Glu
 65          70          75          80
Tyr Val Ser Leu Val Arg Glu Thr Gln Val Leu Gly Lys Glu Glu Leu
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Gln Ala Leu Ser Gly Gln Phe Asp Ala Ile Tyr Phe His Pro Ser Thr
100          105          110
Phe His Cys Ala Arg Leu Ala Ala Gly Ala Gly Leu Gln Leu Val Asp
115          120          125
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Pro Gly His His Gly Gln Arg Ala Ala Ala Asn Gly Phe Cys Val Phe
145          150          155          160
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His Arg Ile Leu Val Val Asp Trp Asp Val His His Gly Gln Gly Ile
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Gln Tyr Leu Phe Glu Asp Asp Pro Ser Val Leu Tyr Phe Ser Trp His
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Arg Tyr Glu His Gly Arg Phe Trp Pro Phe Leu Arg Glu Ser Asp Ala
210          215          220
Asp Ala Val Gly Arg Gly Gln Gly Leu Gly Phe Thr Val Asn Leu Pro
225          230          235          240
Trp Asn Gln Val Gly Met Gly Asn Ala Asp Tyr Val Ala Ala Phe Leu
245          250          255
His Leu Leu Leu Pro Leu Ala Phe Glu Phe Asp Pro Glu Leu Val Leu
260          265          270
Val Ser Ala Gly Phe Asp Ser Ala Ile Gly Asp Pro Glu Gly Gln Met
275          280          285
Gln Ala Thr Pro Glu Cys Phe Ala His Leu Thr Gln Leu Leu Gln Val
290          295          300
Leu Ala Gly Gly Arg Val Cys Ala Val Leu Glu Gly Gly Tyr His Leu
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Glu Ser Leu Ala Glu Ser Val Cys Met Thr Val Gln Thr Leu Leu Gly
325          330          335
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340          345          350
Glu Gly Ser Ala Leu Glu Ser Ile Gln Ser Ala Arg Ala Ala Gln Ala
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Pro His Trp Lys Ser Leu Gln Gln Asp Val Thr Ala Val Pro Met
370          375          380
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<212> DNA

<213> Homo sapiens

<400> 5015

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<212> PRT

<213> Homo sapiens

<400> 5016

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Ala	Ala	Ile	Phe	Val	Gly	Gly	Ser	Gln	Ala	Trp	Leu	Glu	Met	Pro	Lys
		35					40					45			
Ser	Cys	Ala	Ala	Arg	Gln	Cys	Cys	Asn	Arg	Tyr	Ser	Ser	Arg	Arg	Lys
	50					55					60				
Gln	Leu	Thr	Phe	His	Arg	Phe	Pro	Phe	Ser	Arg	Pro	Glu	Leu	Leu	Lys
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Glu	Trp	Val	Leu	Asn	Ile	Gly	Arg	Gly	Asn	Phe	Lys	Pro	Lys	Gln	His
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 <212> PRT
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<210> 5020

<211> 433

<212> PRT

<213> Homo sapiens

<400> 5020

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 145 150 155 160
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<210> 5023

<211> 3482

<212> DNA

<213> Homo sapiens

<400> 5023

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<211> 323

<212> PRT

<213> Homo sapiens

<400> 5024

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 Val Leu Asp Pro Lys Glu Lys Gln Lys Tyr Thr Asp Met Ala Lys Glu
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 Tyr Lys Asp Ala Phe Met Lys Ala Asn Pro Gly Tyr Lys Trp Cys Pro
 65 70 75 80
 Thr Thr Asn Lys Pro Val Lys Ser Pro His Pro Leu Ser Ile His Glu
 85 90 95
 Arg Asn Phe Gly Pro Ser His Leu Thr Leu Gln Glu Thr Cys Gln Ala
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 <213> Homo sapiens

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<211> 188

<212> PRT

<213> Homo sapiens

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 <213> Homo sapiens

<400> 5032
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 35 40 45
 Met Gly Val Leu Ala Arg Glu Ala Pro His Leu Glu Lys Gln Pro Ala
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 Ala Gly Pro Gln Arg Val Leu Pro Gly Glu Arg Glu Glu Arg Pro Pro
 65 70 75 80
 Thr Leu Ser Ala Ser Phe Arg Thr Met Ala Glu Phe Met Asp Tyr Thr
 85 90 95
 Ser Ser Gln Cys Gly Lys Tyr Tyr Ser Ser Val Pro Glu Glu Gly Gly
 100 105 110
 Ala Thr His Val Tyr Arg Tyr His Arg Gly Glu Ser Lys Leu His Met
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 Leu Gly Pro Gly Gly Ser Tyr Gln Ile Ser Glu His Ala Pro
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<210> 5033
 <211> 2888

<212> DNA

<213> Homo sapiens

<400> 5033

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<210> 5034

<211> 550

<212> PRT

<213> Homo sapiens

<400> 5034

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 20 25 30
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 35 40 45
 Cys Val Glu Val Thr Gly Lys Phe Arg Gly Gly Val Asn Pro Phe Thr
 50 55 60
 Arg Gly Cys Cys Gly Asn Val Glu His Val Leu Cys Ser Pro Leu Ala
 65 70 75 80
 Pro Arg Tyr Val Val Glu Pro Pro Arg Leu Pro Leu Ala Val Ser Leu
 85 90 95
 Lys Pro Pro Phe Leu Arg Pro Glu Leu Leu Asp Arg Ala Ala Pro Leu
 100 105 110
 Lys Val Lys Leu Ser Asp Asn Gly Leu Lys Ala Gly Leu Gly Arg Ser
 115 120 125
 Lys Ser Lys Gly Ser Leu Asp Arg Leu Asp Glu Lys Pro Leu Asp Leu
 130 135 140
 Gly Pro Pro Leu Pro Pro Lys Ile Glu Ala Gly Thr Phe Ser Ser Asp
 145 150 155 160
 Leu Gln Thr Pro Arg Pro Gly Ser Ala Glu Ser Ala Leu Ser Val Gln
 165 170 175
 Arg Thr Ser Pro Pro Thr Pro Ala Met Tyr Lys Phe Arg Pro Ala Phe
 180 185 190
 Pro Thr Gly Pro Lys Val Pro Phe Cys Gly Pro Gly Glu Gln Val Pro
 195 200 205
 Gly Pro Asp Ser Leu Thr Leu Gly Asp Asp Asn Ile Arg Ser Leu Asp
 210 215 220
 Phe Val Ser Glu Pro Ser Leu Asp Leu Pro Asp Tyr Gly Pro Gly Gly
 225 230 235 240
 Leu His Ala Ala Tyr Pro Pro Ser Pro Pro Leu Ser Ala Ser Asp Ala
 245 250 255
 Phe Ser Gly Ala Leu Arg Ser Leu Ser Leu Lys Ala Ser Ser Arg Arg
 260 265 270
 Gly Gly Asp His Val Ala Leu Gln Pro Leu Arg Ser Glu Gly Gly Pro
 275 280 285
 Pro Thr Pro His Arg Ser Ile Phe Ala Pro His Ala Leu Pro Asn Arg
 290 295 300
 Asn Gly Ser Leu Ser Tyr Asp Ser Leu Leu Asn Pro Gly Ser Pro Gly
 305 310 315 320
 Gly His Ala Cys Pro Ala His Pro Ala Val Gly Val Ala Gly Tyr His
 325 330 335
 Ser Pro Tyr Leu His Pro Gly Ala Thr Gly Asp Pro Pro Arg Pro Leu
 340 345 350
 Pro Arg Ser Phe Ser Pro Val Leu Gly Pro Arg Pro Arg Glu Pro Ser
 355 360 365
 Pro Val Arg Tyr Asp Asn Leu Ser Arg Thr Ile Met Ala Ser Ile Gln
 370 375 380
 Glu Arg Lys Asp Arg Glu Glu Arg Glu Arg Leu Leu Arg Ser Gln Ala
 385 390 395 400
 Asp Ser Leu Phe Gly Asp Ser Gly Val Tyr Asp Ala Pro Ser Ser Tyr
 405 410 415
 Ser Leu Gln Gln Ala Ser Val Leu Ser Glu Gly Pro Arg Gly Pro Ala

420 425 430
 Leu Arg Tyr Gly Ser Arg Asp Asp Leu Val Ala Gly Pro Gly Phe Gly
 435 440 445
 Gly Ala Arg Asn Pro Ala Leu Gln Thr Ser Leu Ser Ser Leu Ser Ser
 450 455 460
 Ser Val Ser Arg Ala Pro Arg Thr Ser Ser Ser Ser Leu Gln Ala Asp
 465 470 475 480
 Gln Ala Ser Ser Asn Ala Pro Gly Ala Pro Ala Gln Gln Trp Leu Thr
 485 490 495
 Gln Val Thr Cys Thr Pro Gly Pro Ala Leu Pro Ala Arg His Ser Pro
 500 505 510
 Leu Thr Ile Leu Arg Gly Pro Gln Ser Cys Arg Leu His Pro His Gly
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 Pro Pro Arg Ala Thr Ala Leu Ala Asp Arg Ala Glu Gly Pro Pro Ser
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 Ala Glu Asp Ser Pro Lys
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<210> 5035

<211> 2002

<212> DNA

<213> Homo sapiens

<400> 5035

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<210> 5036

<211> 384

<212> PRT

<213> Homo sapiens

<400> 5036

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			20					25					30		
Phe	Gly	Gln	Ala	Glu	Lys	Thr	Glu	Leu	Asp	Ala	His	Phe	Glu	Asn	Leu
		35				40					45				
Leu	Ala	Arg	Ala	Asp	Ser	Thr	Lys	Asn	Trp	Thr	Glu	Lys	Ile	Leu	Arg
	50					55					60				
Gln	Thr	Glu	Val	Leu	Leu	Gln	Pro	Asn	Pro	Ser	Ala	Arg	Val	Glu	Glu

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Pro Thr Thr Pro Tyr Gly Lys Thr Leu Ile Lys Val Ala Glu Ala Glu
          115          120          125
Lys Gln Leu Gly Ala Ala Glu Arg Asp Phe Ile His Thr Ala Ser Ile
          130          135          140
Ser Phe Leu Thr Pro Leu Arg Asn Phe Leu Glu Gly Asp Trp Lys Thr
145          150          155          160
Ile Ser Lys Glu Ser Arg Leu Leu Gln Asn Arg Arg Leu Asp Leu Asp
          165          170          175
Ala Cys Lys Ala Arg Leu Lys Lys Ala Lys Ala Ala Glu Ala Lys Ala
          180          185          190
Thr Leu Trp Asn Asp Glu Val Asp Lys Ala Glu Gln Glu Leu Arg Val
          195          200          205
Ala Gln Thr Glu Phe Asp Arg Gln Ala Glu Val Thr Arg Leu Leu Leu
          210          215          220
Glu Gly Ile Ser Ser Thr His Val Asn His Leu Arg Cys Leu His Glu
225          230          235          240
Phe Val Lys Ser Gln Thr Thr Tyr Tyr Ala Gln Cys Tyr Arg His Met
          245          250          255
Leu Asp Leu Gln Lys Gln Leu Gly Ser Ser Gln Gly Ala Ile Ser Arg
          260          265          270
His Leu Arg Gly His His Arg Ala Arg Leu Pro Pro Leu Ser Ser Thr
          275          280          285
Ser Pro Thr Thr Ala Ala Ala Thr Met Pro Val Val Pro Ser Val Ala
          290          295          300
Ser Leu Ala Pro Pro Gly Glu Ala Ser Leu Cys Leu Glu Glu Val Ala
305          310          315          320
Pro Pro Ala Ser Gly Thr Arg Lys Ala Arg Val Leu Tyr Asp Tyr Glu
          325          330          335
Ala Ala Asp Ser Ser Glu Leu Ala Leu Leu Ala Asp Glu Leu Ile Thr
          340          345          350
Val Tyr Ser Leu Pro Gly Met Asp Pro Asp Trp Leu Ile Gly Glu Arg
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Gly Asn Lys Lys Gly Lys Val Pro Val Thr Tyr Leu Glu Leu Leu Ser
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<210> 5037

<211> 2102

<212> DNA

<213> Homo sapiens

<400> 5037

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120

gtttgctgga gttgagggtc agccgtccct ctgcagggtg ggtcaccctc ctgttaacca

180

cgccctgccc cgccccgctt cctccctctc gtgcgtcatc aagcatttgc tgttggtttc

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 2102

<210> 5038

<211> 533

<212> PRT

<213> Homo sapiens

<400> 5038

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Ile	Cys	Lys	Gln	Ser	Met	Ser	Val	Ser	Lys	Glu	Tyr	Asn	Leu	Arg	Arg
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His	Tyr	Gln	Thr	Asn	His	Ser	Lys	His	Tyr	Asp	Gln	Tyr	Thr	Glu	Arg
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Met	Arg	Asp	Glu	Lys	Leu	His	Glu	Leu	Lys	Lys	Gly	Leu	Arg	Lys	Tyr
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Leu	Leu	Gly	Ser	Ser	Asp	Thr	Glu	Cys	Pro	Glu	Gln	Lys	Gln	Val	Phe
				85					90					95	
Ala	Asn	Pro	Ser	Pro	Thr	Gln	Lys	Ser	Pro	Val	Gln	Pro	Val	Glu	Asp
		100						105						110	
Leu	Ala	Gly	Asn	Leu	Trp	Glu	Lys	Leu	Arg	Glu	Lys	Ile	Arg	Ser	Phe
	115					120						125			
Val	Ala	Tyr	Ser	Ile	Ala	Ile	Asp	Glu	Ile	Thr	Asp	Ile	Asn	Asn	Thr
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Thr	Gln	Leu	Ala	Ile	Phe	Ile	Arg	Gly	Val	Asp	Glu	Asn	Phe	Asp	Val
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Ser	Glu	Glu	Leu	Leu	Asp	Thr	Val	Pro	Met	Thr	Gly	Thr	Lys	Ser	Gly
			165					170						175	
Asn	Glu	Ile	Phe	Ser	Arg	Val	Glu	Lys	Ser	Leu	Lys	Lys	Phe	Cys	Ile
	180							185					190		
Asp	Trp	Ser	Lys	Leu	Val	Ser	Val	Ala	Ser	Thr	Gly	Thr	Pro	Ala	Met
	195					200						205			
Val	Asp	Ala	Asn	Asn	Gly	Leu	Val	Thr	Lys	Leu	Lys	Ser	Arg	Val	Ala
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Thr	Phe	Cys	Lys	Gly	Ala	Glu	Leu	Lys	Ser	Ile	Cys	Cys	Ile	Ile	His
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Pro	Glu	Ser	Leu	Cys	Ala	Gln	Lys	Leu	Lys	Met	Asp	His	Val	Met	Asp
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Val	Val	Val	Lys	Ser	Val	Asn	Trp	Ile	Cys	Ser	Arg	Gly	Leu	Asn	His
	260							265					270		
Ser	Glu	Phe	Thr	Thr	Leu	Leu	Tyr	Glu	Leu	Asp	Ser	Gln	Tyr	Gly	Ser
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Leu	Leu	Tyr	Tyr	Thr	Glu	Ile	Lys	Trp	Leu	Ser	Arg	Gly	Leu	Val	Leu

290 295 300
 Lys Arg Phe Phe Glu Ser Leu Glu Glu Ile Asp Ser Phe Met Ser Ser
 305 310 315 320
 Arg Gly Lys Pro Leu Pro Gln Leu Ser Ser Ile Asp Trp Ile Arg Asp
 325 330 335
 Leu Ala Phe Leu Val Asp Met Thr Met His Leu Asn Ala Leu Asn Ile
 340 345 350
 Ser Leu Gln Gly His Ser Gln Ile Val Thr Gln Met Tyr Asp Leu Ile
 355 360 365
 Arg Ala Phe Leu Ala Lys Leu Cys Leu Trp Glu Thr His Leu Thr Arg
 370 375 380
 Asn Asn Leu Ala His Phe Pro Thr Leu Lys Leu Ala Ser Arg Asn Glu
 385 390 395 400
 Ser Asp Gly Leu Asn Tyr Ile Pro Lys Ile Ala Glu Leu Lys Thr Glu
 405 410 415
 Phe Gln Lys Arg Leu Ser Asp Phe Lys Leu Tyr Glu Ser Glu Leu Thr
 420 425 430
 Leu Phe Ser Ser Pro Phe Ser Thr Lys Ile Asp Ser Val His Glu Glu
 435 440 445
 Leu Gln Met Glu Val Ile Asp Leu Gln Cys Asn Thr Val Leu Lys Thr
 450 455 460
 Lys Tyr Asp Lys Val Gly Ile Pro Glu Phe Tyr Lys Tyr Leu Trp Gly
 465 470 475 480
 Ser Tyr Pro Lys Tyr Lys His His Cys Ala Lys Ile Leu Ser Met Phe
 485 490 495
 Gly Ser Thr Tyr Ile Cys Glu Gln Leu Phe Ser Ile Met Lys Leu Ser
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 515 520 525
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<210> 5039

<211> 3059

<212> DNA

<213> Homo sapiens

<400> 5039

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<211> 616

<212> PRT

<213> Homo sapiens

<400> 5040

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Tyr His Ser Ala Gly Asn Ile Val Gly Ile Gly Gln Cys Leu Leu His		
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<210> 5041

<211> 2461

<212> DNA

<213> Homo sapiens

<400> 5041

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<210> 5042

<211> 686

<212> PRT

<213> Homo sapiens

<400> 5042

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<211> 1824

<212> DNA

<213> Homo sapiens

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<210> 5044

<211> 273

<212> PRT

<213> Homo sapiens

<400> 5044

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Thr Ser Lys Ser Leu Leu Pro Val Arg Ser Lys Glu Val Asp Val Ser			
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Lys Gln Leu His Ser Gly Gly Pro Glu Asn Asp Val Thr Lys Ile Thr			
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Lys Leu Arg Arg Glu Asn Gly Gln Met Lys Ala Thr Asp Thr Ala Thr			
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Arg Arg Asn Val Arg Lys Gly Tyr Lys Pro Leu Ser Lys Gln Lys Ser			
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Gln Leu His Gln Lys Leu Thr Glu Thr Gln Gly Glu Leu Lys Asp Leu			
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<211> 462

<212> DNA

<213> Homo sapiens

<400> 5045

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<213> Homo sapiens

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		20					25					30			
Glu	Ser	Gly	Asp	Glu	Phe	Thr	Tyr	Gly	Asp	Val	Pro	Val	Glu	Asn	Gly
		35				40					45				
Met	Ala	Pro	Phe	Phe	Glu	Met	Lys	Leu	Lys	His	Tyr	Lys	Ile	Phe	Glu
	50					55				60					
Gly	Met	Pro	Val	Thr	Phe	Thr	Cys	Arg	Val	Ala	Gly	Asn	Pro	Lys	Pro

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65          70          75          80
Lys Ile Tyr Trp Phe Lys Asp Gly Lys Gln Ile Ser Pro Lys Ser Asp
          85          90          95
His Tyr Thr Ile Gln Arg Asp Leu Asp Gly Thr Cys Ser Leu His Thr
          100          105          110
Thr Ala Ser Thr Leu Asp Asp Asp Gly Asn Tyr Thr Ile Met Ala Ala
          115          120          125
Asn Pro Gln Gly Arg Ile Ser Cys Thr Gly Arg Leu Met Val Gln Ala
          130          135          140
Val Asn Gln Arg Gly Arg Ser Pro Arg Ser Pro Ser Gly His Pro His
145          150          155          160
Val Arg Arg Pro Arg Ser Arg Ser Arg Asp Ser Gly Asp Glu Asn Glu
          165          170          175
Pro Ile Gln Glu Arg Phe Phe Arg Pro His Phe Leu Gln Ala Pro Gly
          180          185          190
Asp Leu Thr Val Gln Glu Gly Lys Leu Cys Arg Met Asp Cys Lys Val
          195          200          205
Ser Gly Leu Pro Thr Pro Asp Leu Ser Trp Gln Leu Asp Gly Lys Pro
          210          215          220
Val Arg Pro Asp Ser Ala His Lys Met Leu Val Arg Glu Asn Gly Val
225          230          235          240
His Ser Leu Ile Ile Glu Pro Val Thr Ser Arg Asp Ala Gly Ile Tyr
          245          250          255
Thr Cys Ile Ala Thr Asn Arg Ala Gly Gln Asn Ser Phe Ser Leu Glu
          260          265          270
Leu Val Val Ala Ala Lys Glu Ala His Lys Pro Pro Val Phe Ile Glu
          275          280          285
Lys Leu Gln Asn Thr Gly Val Ala Asp Gly Tyr Pro Val Arg Leu Glu
          290          295          300
Cys Arg Val Leu Gly Val Pro Pro Pro Gln Ile Phe Trp Lys Lys Glu
305          310          315          320
Asn Glu Ser Leu Thr His Ser Thr Asp Arg Val Ser Met His Gln Asp
          325          330          335
Asn His Gly Tyr Ile Cys Leu Leu Ile Gln Gly Ala Thr Lys Glu Asp
          340          345          350
Ala Gly Trp Tyr Thr Val Ser Ala Lys Asn Glu Ala Gly Ile Val Ser
          355          360          365
Cys Thr Ala Arg Leu Asp Val Tyr Thr Gln Trp His Gln Gln Ser Gln
          370          375          380
Ser Thr Lys Pro Lys Lys Val Arg Pro Ser Ala Ser Arg Tyr Ala Ala
385          390          395          400
Leu Ser Asp Gln Gly Leu Asp Ile Lys Ala Ala Phe Gln Pro Glu Ala
          405          410          415
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<210> 5053

<211> 781

<212> DNA

<213> Homo sapiens

<400> 5053

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 180
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 a
 781

<210> 5054

<211> 156

<212> PRT

<213> Homo sapiens

<400> 5054

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		20						25				30			
Leu	Ala	Leu	Ala	Ser	Val	Pro	Cys	Ala	Gln	Gly	Ala	Cys	Pro	Ala	Ser
		35					40					45			
Ala	Asp	Leu	Lys	His	Ser	Asp	Gly	Thr	Arg	Thr	Cys	Ala	Lys	Leu	Tyr
	50					55					60				
Asp	Lys	Ser	Asp	Pro	Tyr	Tyr	Glu	Asn	Cys	Cys	Gly	Gly	Ala	Glu	Leu
65					70				75					80	
Ser	Leu	Glu	Ser	Gly	Ala	Asp	Leu	Pro	Tyr	Leu	Pro	Ser	Asn	Trp	Ala
			85					90					95		
Asn	Thr	Ala	Ser	Ser	Leu	Val	Val	Ala	Pro	Arg	Cys	Glu	Leu	Thr	Val
		100						105					110		
Trp	Ser	Arg	Gln	Gly	Lys	Ala	Gly	Lys	Thr	His	Lys	Phe	Ser	Ala	Gly
		115					120					125			
Thr	Tyr	Pro	Arg	Leu	Glu	Glu	Tyr	Arg	Arg	Gly	Ile	Leu	Gly	Asp	Trp
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150

155

<210> 5055

<211> 2520

<212> DNA

<213> Homo sapiens

<400> 5055

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180
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480
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1380

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<210> 5056

<211> 672

<212> PRT

<213> Homo sapiens

<400> 5056

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			20					25					30		
Asp	Val	Thr	Val	Ile	Val	Glu	Asp	Arg	Lys	Phe	Arg	Ala	His	Lys	Asn
		35					40					45			
Ile	Leu	Ser	Ala	Ser	Ser	Thr	Tyr	Phe	His	Gln	Leu	Phe	Ser	Val	Ala
	50					55					60				
Gly	Gln	Val	Val	Glu	Leu	Ser	Phe	Ile	Arg	Ala	Glu	Ile	Phe	Ala	Glu

65					70					75				80	
Ile	Leu	Asn	Tyr	Ile	Tyr	Ser	Ser	Lys	Ile	Val	Arg	Val	Arg	Ser	Asp
				85					90					95	
Leu	Leu	Asp	Glu	Leu	Ile	Lys	Ser	Gly	Gln	Leu	Leu	Gly	Val	Lys	Phe
			100					105					110		
Ile	Ala	Glu	Leu	Gly	Val	Pro	Leu	Ser	Gln	Val	Lys	Ser	Ile	Ser	Gly
			115				120					125			
Thr	Ala	Gln	Asp	Gly	Asn	Thr	Glu	Pro	Leu	Pro	Pro	Asp	Ser	Gly	Asp
	130					135					140				
Lys	Asn	Leu	Val	Ile	Gln	Lys	Ser	Lys	Asp	Glu	Ala	Gln	Asp	Asn	Gly
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Ala	Thr	Ile	Met	Pro	Ile	Ile	Thr	Glu	Ser	Phe	Ser	Leu	Ser	Ala	Glu
			165					170						175	
Asp	Tyr	Glu	Met	Lys	Lys	Ile	Ile	Val	Thr	Asp	Ser	Asp	Asp	Asp	Asp
		180						185				190			
Asp	Asp	Val	Ile	Phe	Cys	Ser	Glu	Ile	Leu	Pro	Thr	Lys	Glu	Thr	Leu
		195					200					205			
Pro	Ser	Asn	Asn	Thr	Val	Ala	Gln	Val	Gln	Ser	Asn	Pro	Gly	Pro	Val
	210					215					220				
Ala	Ile	Ser	Asp	Val	Ala	Pro	Ser	Ala	Ser	Asn	Asn	Ser	Pro	Pro	Leu
225				230						235					240
Thr	Asn	Ile	Thr	Pro	Thr	Gln	Lys	Leu	Pro	Thr	Pro	Val	Asn	Gln	Ala
			245					250						255	
Thr	Leu	Ser	Gln	Thr	Gln	Gly	Ser	Glu	Lys	Leu	Leu	Val	Ser	Ser	Ala
		260						265					270		
Pro	Thr	His	Leu	Thr	Pro	Asn	Ile	Ile	Leu	Leu	Asn	Gln	Thr	Pro	Leu
		275					280					285			
Ser	Thr	Pro	Pro	Asn	Val	Ser	Ser	Ser	Leu	Pro	Asn	His	Met	Pro	Ser
	290				295						300				
Ser	Ile	Asn	Leu	Leu	Val	Gln	Asn	Gln	Gln	Thr	Pro	Asn	Ser	Ala	Ile
305				310						315					320
Leu	Thr	Gly	Asn	Lys	Ala	Asn	Glu	Glu	Glu	Glu	Glu	Glu	Ile	Ile	Asp
			325					330					335		
Asp	Asp	Asp	Asp	Thr	Ile	Ser	Ser	Ser	Pro	Asp	Ser	Ala	Val	Ser	Asn
		340						345				350			
Thr	Ser	Leu	Val	Pro	Gln	Ala	Asp	Thr	Ser	Gln	Asn	Thr	Ser	Phe	Asp
		355					360					365			
Gly	Ser	Leu	Ile	Gln	Lys	Met	Gln	Ile	Pro	Thr	Leu	Leu	Gln	Glu	Pro
	370					375					380				
Leu	Ser	Asn	Ser	Leu	Lys	Ile	Ser	Asp	Ile	Ile	Thr	Arg	Asn	Thr	Asn
385				390						395					400
Asp	Pro	Gly	Val	Gly	Ser	Lys	His	Leu	Met	Glu	Gly	Gln	Lys	Ile	Ile
			405					410					415		
Thr	Leu	Asp	Thr	Ala	Thr	Glu	Ile	Glu	Gly	Leu	Ser	Thr	Gly	Cys	Lys
		420						425				430			
Val	Tyr	Ala	Asn	Ile	Gly	Glu	Asp	Thr	Tyr	Asp	Ile	Val	Ile	Pro	Val
	435						440					445			
Lys	Asp	Asp	Pro	Asp	Glu	Gly	Glu	Ala	Arg	Leu	Glu	Asn	Glu	Ile	Pro
	450					455					460				
Lys	Thr	Ser	Gly	Ser	Glu	Met	Ala	Asn	Lys	Arg	Met	Lys	Val	Lys	His
465				470						475					480
Asp	Asp	His	Tyr	Glu	Leu	Ile	Val	Asp	Gly	Arg	Val	Tyr	Tyr	Ile	Cys
			485					490					495		
Ile	Val	Cys	Lys	Arg	Ser	Tyr	Val	Cys	Leu	Thr	Ser	Leu	Arg	Arg	His

500								505					510				
Phe	Asn	Ile	His	Ser	Trp	Glu	Lys	Lys	Tyr	Pro	Cys	Arg	Tyr	Cys	Glu		
515				520				525									
Lys	Val	Phe	Pro	Leu	Ala	Glu	Tyr	Arg	Thr	Lys	His	Glu	Ile	His	His		
530				535				540									
Thr	Gly	Glu	Arg	Arg	Tyr	Gln	Cys	Leu	Ala	Cys	Gly	Lys	Ser	Phe	Ile		
545				550				555				560					
Asn	Tyr	Gln	Phe	Met	Ser	Ser	His	Ile	Lys	Ser	Val	His	Ser	Gln	Asp		
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Pro	Ser	Gly	Asp	Ser	Lys	Leu	Tyr	Arg	Leu	His	Pro	Cys	Arg	Ser	Leu		
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Gln	Ile	Arg	Gln	Tyr	Ala	Tyr	His	Ser	Asp	Arg	Ser	Ser	Thr	Ile	Pro		
595				600				605									
Ala	Met	Lys	Asp	Asp	Gly	Ile	Gly	Tyr	Lys	Val	Asp	Thr	Gly	Lys	Glu		
610				615				620									
Pro	Pro	Val	Gly	Thr	Thr	Thr	Ser	Thr	Gln	Asn	Lys	Pro	Met	Thr	Trp		
625				630				635				640					
Glu	Asp	Ile	Phe	Ile	Gln	Gln	Glu	Asn	Asp	Ser	Ile	Phe	Lys	Gln	Asn		
645				650				655									
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<211> 673
<212> DNA
<213> Homo sapiens
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240
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<210> 5058

<211> 122
 <212> PRT
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 35 40 45
 Gly Gln Thr Pro Gln Glu Arg Val Glu Glu Val Leu Ser Gly Lys Leu
 50 55 60
 Phe Asp Arg Leu Arg Asp Glu Asn Pro Asp Phe Arg Glu Lys Ile Ile
 65 70 75 80
 Ala Ile Asn Ser Glu Leu Thr Gln Pro Lys Leu Ala Leu Ser Glu Glu
 85 90 95
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 100 105 110
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<210> 5059
 <211> 480
 <212> DNA
 <213> Homo sapiens

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 120
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<210> 5060
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Leu	Pro	His	Thr	Leu	Pro	Ala	Phe	Leu	Pro	His	Cys	Leu	Glu	Asp	Leu
	35				40				45						
Leu	Arg	Ala	Trp	Val	Leu	Val	Ile	Gly	Ser	Ala	Pro	Arg	Ala	Gly	Cys
	50				55				60						
Arg	Leu	Ser	Leu	Glu	Lys	Asp	Ser	Gln	Leu	Val	Ser	Leu	Cys	Ile	His
65				70				75					80		
Ala	Leu	Cys	Pro	Glu	Arg	Pro	Ser	Gln	Ser	Ala	Arg	Ala	Val	Ile	Thr
		85						90					95		
Arg	Tyr	His	Ala	Leu	Gly	Gly	Leu	Thr	His	Arg	Glu	Cys	Leu	Ser	Val
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Leu Glu

<210> 5061

<211> 2462

<212> DNA

<213> Homo sapiens

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720
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780
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1080
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<211> 136

<212> PRT

<213> Homo sapiens

<400> 5062

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Val Arg Arg Ser Pro Ser Ser Arg Phe Ser Phe Phe Pro Pro Gln Gln
 35           40           45
Arg Asn Trp Arg Lys Asp Ile Lys Leu Ser Ala Val Asp Leu Ser Ala
 50           55           60
Glu Ile Phe Pro Glu Ser Met Val Val Leu Asn Tyr Leu His Val Ser
 65           70           75           80
Ser Ile Phe Asn Ser Gly Val Gly Leu Phe Leu Ile Ser Ser Gln Lys
 85           90           95
Cys Ser Ala Leu Gly Glu Gly Thr Ser Pro Leu Ala Cys His Phe Pro
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<210> 5063

<211> 561

<212> DNA

<213> Homo sapiens

<400> 5063

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<213> Homo sapiens

<400> 5064

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      20           25           30
Ala Arg Lys Tyr Trp Leu Thr Cys Phe Glu Glu Ala Leu Asp Gly Val
      35           40           45
Val Lys Arg Ala Val Ala Ser Gln Pro Asp Ser Val Asp Ala Ala Glu
      50           55           60
Arg Ala Glu Lys Phe Arg Gln Lys Tyr Trp Asn Lys Leu Gln Thr Leu
65           70           75           80
Arg Gln Gln Pro Phe Ala Tyr Gly Thr Leu Thr Val Arg Ser Leu Leu
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<211> 370

<212> DNA

<213> Homo sapiens

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<211> 123

<212> PRT

<213> Homo sapiens

<400> 5066

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      20           25           30
Leu Lys Thr Ile Ala Asp His Ser Glu Lys Asn Lys Met Glu Pro Arg
      35           40           45
Asn Leu Ala Leu Val Phe Gly Pro Thr Leu Val Arg Thr Ser Glu Asp
      50           55           60
Asn Met Thr Asp Met Val Thr His Met Pro Asp Arg Tyr Lys Ile Val
65           70           75           80
Glu Thr Leu Ile Gln His Ser Asp Trp Phe Phe Ser Asp Glu Glu Asp

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<210> 5067

<211> 2023

<212> DNA

<213> Homo sapiens

<400> 5067

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<211> 179

<212> PRT

<213> Homo sapiens

<400> 5068

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			20					25					30		
Ala	Leu	Gln	Asn	Glu	Arg	Thr	Glu	Arg	Ile	Arg	Ser	Leu	Leu	Glu	Arg
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65				70					75					80	
Ser	Tyr	Pro	Gly	Ala	Ser	Gly	Trp	Ser	His	Asn	Pro	Thr	Gly	Gly	Pro
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 <211> 3655
 <212> DNA
 <213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 5070

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 2040
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 2100
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<210> 5072

<211> 76

<212> PRT

<213> Homo sapiens

<400> 5072

Met	Glu	Ser	His	Ser	Val	Thr	Gln	Ala	Gly	Val	Gln	Cys	Arg	Asp	Leu
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Gly	Ser	Leu	Gln	Pro	Pro	Pro	Pro	Arg	Phe	Lys	Gln	Phe	Ser	His	Leu
			20					25						30	
Ser	Leu	Gln	Ser	Ser	Trp	Asp	Tyr	Arg	His	Ala	Gln	Pro	Cys	Pro	Ala
			35					40					45		
Asn	Phe	Cys	Asn	Phe	Ser	Arg	Asp	Gly	Phe	Ser	Leu	Ser	Arg	Asp	Gly
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Cys	Leu	Pro	Gly	Trp	Ser	Arg	Thr	Pro	Asp	Leu	Arg				
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<210> 5073

<211> 1712

<212> DNA

<213> Homo sapiens

<400> 5073

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 1712

<210> 5074

<211> 240

<212> PRT

<213> Homo sapiens

<400> 5074

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Pro	Ala	Val	Asp	Ser	Val	Leu	Val	Lys	Leu	Leu	Glu	Val	Met	Glu	Gly
			20					25					30		
Met	Asp	Lys	Glu	Thr	Phe	Glu	Phe	Lys	Phe	Gly	Lys	Glu	Leu	Thr	Phe
		35					40					45			
Thr	Thr	Val	Leu	Ser	Asp	Gln	Gln	Val	Val	Glu	Leu	Ile	Pro	Gly	Gly
	50					55				60					
Ala	Gly	Ile	Val	Val	Gly	Tyr	Gly	Asp	Arg	Ser	Arg	Phe	Ile	Gln	Leu
65					70				75					80	
Val	Gln	Lys	Ala	Arg	Leu	Glu	Glu	Ser	Lys	Glu	Gln	Val	Ala	Ala	Met
			85					90					95		
Gln	Ala	Gly	Leu	Leu	Lys	Val	Val	Pro	Gln	Ala	Val	Leu	Asp	Leu	Leu
			100					105					110		
Thr	Trp	Gln	Glu	Leu	Glu	Lys	Lys	Val	Cys	Gly	Asp	Pro	Glu	Val	Thr
		115					120					125			
Val	Asp	Ala	Leu	Arg	Lys	Leu	Thr	Arg	Phe	Glu	Asp	Phe	Glu	Pro	Ser
		130				135					140				
Asp	Ser	Arg	Val	Gln	Tyr	Phe	Trp	Glu	Ala	Leu	Asn	Asn	Phe	Thr	Asn
145					150				155					160	
Glu	Asp	Arg	Ser	Arg	Phe	Leu	Arg	Phe	Val	Thr	Gly	Arg	Ser	Arg	Leu
			165					170					175		
Pro	Ala	Arg	Xaa	Ser	Thr	Ser	Thr	Gln	Thr	Ser	Trp	Ala	Thr	Arg	Pro
			180					185					190		
Xaa	Asp	Ala	Leu	Pro	Glu	Ser	Ser	Thr	Cys	Ser	Ser	Thr	Leu	Phe	Leu
		195					200					205			
Pro	His	Tyr	Ala	Ser	Ala	Lys	Val	Cys	Glu	Glu	Lys	Leu	Arg	Tyr	Ala
		210				215					220				
Ala	Tyr	Asn	Cys	Val	Ala	Ile	Asp	Thr	Asp	Met	Ser	Pro	Trp	Glu	Glu
225					230					235					240

<210> 5075

<211> 444

<212> DNA

<213> Homo sapiens

<400> 5075

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 240
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<210> 5076

<211> 90

<212> PRT

<213> Homo sapiens

<400> 5076

Met	Gly	Ile	Ser	Asn	Arg	His	Val	Ala	Ser	Arg	Lys	Arg	Ser	Gln	Tyr
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Ile	Arg	Lys	Gln	Gln	Val	Asn	Cys	Ser	Pro	Arg	Trp	Gln	Trp	Glu	Ala
			20					25					30		
Cys	Trp	Asp	Gly	Gly	Gly	Ser	Gly	Asn	Phe	Ser	Ser	Pro	Gly	Thr	Leu
		35				40						45			
Arg	Glu	Thr	Glu	Val	Ile	Thr	Ala	Val	Leu	Glu	Leu	Gly	Arg	Gly	Gly
	50				55					60					
Asp	Gln	Val	Thr	Ala	Asp	Gln	Lys	Ser	Leu	Asn	Ile	Asn	Ala	Met	Glu
65				70					75					80	
Arg	Glu	Leu	Ala	Leu	Ser	Leu	Arg	Val	Ala						
				85					90						

<210> 5077

<211> 2352

<212> DNA

<213> Homo sapiens

<400> 5077

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 120
 cagcagatca tgtttgtctg attattaaga attctttttt gtaacattaa ctctctaaag
 180
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 240
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 300
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 360

agctgattat tagaattagt aaaaatgatt aagagaggat gacacaacca tacgggattt
420
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480
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720
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 2352

<210> 5078

<211> 558

<212> PRT

<213> Homo sapiens

<400> 5078

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Val	Arg	Ser	Val	Val	Pro	Asn	Lys	Ser	Asn	Asn	Glu	Ile	Val	Leu	Val
			20					25					30		
Leu	Gln	Gln	Phe	Asp	Phe	Asn	Val	Asp	Lys	Ala	Val	Gln	Ala	Phe	Val
			35				40					45			
Asp	Gly	Ser	Ala	Ile	Gln	Val	Leu	Lys	Glu	Trp	Asn	Met	Thr	Gly	Lys
			50				55				60				
Lys	Lys	Asn	Asn	Lys	Arg	Lys	Arg	Ser	Lys	Ser	Lys	Gln	His	Gln	Gly
65					70				75					80	
Asn	Lys	Asp	Ala	Lys	Asp	Lys	Val	Glu	Arg	Pro	Glu	Ala	Gly	Pro	Leu
			85					90						95	
Gln	Pro	Gln	Pro	Pro	Gln	Ile	Gln	Asn	Gly	Pro	Met	Asn	Gly	Cys	Glu
			100					105					110		
Lys	Asp	Ser	Ser	Ser	Thr	Asp	Ser	Ala	Asn	Glu	Lys	Pro	Ala	Leu	Ile
			115				120					125			
Pro	Arg	Glu	Lys	Lys	Ile	Ser	Ile	Leu	Glu	Glu	Pro	Ser	Lys	Ala	Leu
			130				135					140			
Arg	Gly	Val	Thr	Glu	Gly	Asn	Arg	Leu	Leu	Gln	Gln	Lys	Leu	Ser	Leu
145					150					155					160
Asp	Gly	Asn	Pro	Lys	Pro	Ile	His	Gly	Thr	Thr	Glu	Arg	Ser	Asp	Gly
			165						170					175	
Leu	Gln	Trp	Ser	Ala	Glu	Gln	Pro	Cys	Asn	Pro	Ser	Lys	Pro	Lys	Ala
			180					185					190		
Lys	Thr	Ser	Pro	Val	Lys	Ser	Asn	Thr	Pro	Ala	Ala	His	Leu	Glu	Ile
			195				200					205			
Lys	Pro	Asp	Glu	Leu	Ala	Lys	Lys	Arg	Gly	Pro	Asn	Ile	Glu	Lys	Ser
			210				215				220				
Val	Lys	Asp	Leu	Gln	Arg	Cys	Thr	Val	Ser	Leu	Thr	Arg	Tyr	Arg	Val
225					230					235					240
Met	Ile	Lys	Glu	Glu	Val	Asp	Ser	Ser	Val	Lys	Lys	Ile	Lys	Ala	Ala
					245				250					255	
Phe	Ala	Glu	Leu	His	Asn	Cys	Ile	Ile	Asp	Lys	Glu	Val	Ser	Leu	Met

260	265	270
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275	280	285
Arg Gln Lys Lys Ala Glu Glu Leu Lys Arg Leu Thr Asp Leu Ala Ser		
290	295	300
Gln Met Ala Glu Met Gln Leu Ala Glu Leu Arg Ala Glu Ile Lys His		
305	310	315
Phe Val Ser Glu Arg Lys Tyr Asp Glu Glu Leu Gly Lys Ala Ala Arg		
325	330	335
Phe Ser Cys Asp Ile Glu Gln Leu Lys Ala Gln Ile Met Leu Cys Gly		
340	345	350
Glu Ile Thr His Pro Lys Asn Asn Tyr Ser Ser Arg Thr Pro Cys Ser		
355	360	365
Ser Leu Leu Pro Leu Leu Asn Ala His Ala Ala Thr Ser Gly Lys Gln		
370	375	380
Ser Asn Phe Ser Arg Lys Ser Ser Thr His Asn Lys Pro Ser Glu Gly		
385	390	395
Lys Ala Ala Asn Pro Lys Met Val Ser Ser Leu Pro Ser Thr Ala Asp		
405	410	415
Pro Ser His Gln Thr Met Pro Ala Asn Lys Gln Asn Gly Ser Ser Asn		
420	425	430
Gln Arg Arg Arg Phe Asn Pro Gln Tyr His Asn Asn Arg Leu Asn Gly		
435	440	445
Pro Ala Lys Ser Gln Gly Ser Gly Asn Glu Ala Glu Pro Leu Gly Lys		
450	455	460
Gly Asn Ser Arg His Glu His Arg Arg Gln Pro His Asn Gly Phe Arg		
465	470	475
Pro Lys Asn Lys Gly Glu Ala Lys Asn Gln Glu Ala Ser Leu Gly Met		
485	490	495
Lys Thr Pro Glu Ala Pro Ala His Ser Glu Lys Pro Arg Arg Arg Gln		
500	505	510
His Ala Ala Asp Thr Ser Glu Ala Arg Pro Phe Arg Gly Ser Val Gly		
515	520	525
Arg Val Ser Gln Cys Asn Leu Cys Pro Thr Arg Ile Glu Val Ser Thr		
530	535	540
Asp Ala Ala Val Leu Ser Val Pro Ala Val Thr Leu Val Ala		
545	550	555

<210> 5079

<211> 1338

<212> DNA

<213> Homo sapiens

<400> 5079

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<210> 5080

<211> 165

<212> PRT

<213> Homo sapiens

<400> 5080

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Arg	Arg	Ala	Arg	Leu	Pro	Gln	Tyr	Lys	Arg	Pro	Pro	Gly	Arg	Val	Gly
		20						25				30			
Gly	Gly	Asp	Ser	Gly	Arg	Arg	Asn	Met	Ala	Val	Ala	Asp	Leu	Ala	Leu
		35					40				45				
Ile	Pro	Asp	Val	Asp	Ile	Asp	Ser	Asp	Gly	Val	Phe	Lys	Tyr	Val	Leu
	50					55				60					
Ile	Arg	Val	His	Ser	Ala	Pro	Arg	Ser	Gly	Ala	Pro	Ala	Ala	Glu	Ser
65				70					75					80	
Lys	Glu	Ile	Val	Arg	Gly	Tyr	Lys	Trp	Ala	Glu	Tyr	His	Ala	Asp	Ile

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Tyr Asp Lys Val Ser Gly Asp Met Gln Lys Gln Gly Cys Asp Cys Glu
      100      105      110
Cys Leu Gly Gly Gly Arg Ile Ser His Gln Ser Gln Asp Lys Lys Ile
      115      120      125
His Val Tyr Gly Tyr Ser Met Val Ser Arg Ser Pro Val Pro Pro Cys
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145      150      155      160
Thr Arg Gly Pro Ser
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<210> 5081
 <211> 561
 <212> DNA
 <213> Homo sapiens

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<400> 5081
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<210> 5082
 <211> 111
 <212> PRT
 <213> Homo sapiens

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<400> 5082
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      20      25      30
Asp Ala Val Arg Met Pro Leu Gly Ala Gly Thr Pro Val Asn Val Gln
      35      40      45
Arg Arg Glu Asp Ser Ala Thr Glu Gly Ser His Arg Leu Ile Leu Ala
      50      55      60
Ala Asn Arg Asp Glu Phe Tyr Ser Arg Pro Ser Lys Leu Ala Asp Phe

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65					70					75				80
Trp	Gly	Asn	Asn	Asn	Glu	Ile	Leu	Ser	Gly	Leu	Asp	Met	Glu	Glu
					85				90				95	
Lys	Glu	Gly	Gly	Thr	Trp	Leu	Gly	Ile	Ser	Thr	Arg	Gly	Lys	Leu
					100				105				110	

<210> 5083

<211> 1856

<212> DNA

<213> Homo sapiens

<400> 5083

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<211> 396

<212> PRT

<213> Homo sapiens

<400> 5084

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<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 5086

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His	Pro	Asp	Val	His	Ile	Met	Gln	His	His	Val	Leu	Pro	Ile	Gln	Ala
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<210> 5088

<211> 465

<212> PRT

<213> Homo sapiens

<400> 5088

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		20						25					30		
Gln	Gly	Arg	Ser	Cys	Pro	Gly	Thr	Pro	Asp	Ile	Ala	Asp	Val	Ala	Glu
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Leu	Arg	Val	Glu	Leu	Thr	His	Gly	Ala	Glu	Thr	Leu	Thr	Leu	Trp	Gln
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Ser	Thr	Gly	Pro	Trp	Xaa	Pro	Trp	Xaa	Trp	Gln	Glu	Leu	Ala	Val	Thr
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Thr	Gly	Arg	Ile	Arg	Gly	Asp	Phe	Arg	Val	Thr	Phe	Ser	Ala	Thr	Arg
			85					90						95	
Asn	Ala	Thr	His	Arg	Gly	Ala	Val	Ala	Leu	Asp	Asp	Leu	Glu	Phe	Trp
		100					105						110		
Asp	Cys	Gly	Leu	Pro	Thr	Pro	Gln	Ala	Asn	Cys	Pro	Pro	Gly	His	His

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His Cys Gln Asn Lys Val	Cys Val Glu Pro Gln	Gln Leu Cys Asp Gly
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Glu Asp Asn Cys Gly Asp	Leu Ser Asp Glu Asn Pro	Leu Thr Cys Gly
145	150	155
Arg His Ile Ala Thr Asp	Phe Glu Thr Gly Leu Gly	Pro Trp Asn Arg
165	170	175
Ser Glu Gly Trp Ser Arg	Asn His Arg Ala Gly Gly	Pro Glu Arg Pro
180	185	190
Ser Trp Pro Arg Arg Asp	His Ser Arg Asn Ser Ala	Xaa Arg Leu Val
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Phe Tyr Gln Tyr Leu Ser	Gly Ser Glu Ala Gly Cys	Leu Gln Leu Phe
210	215	220
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225	230	235
Arg Arg Arg Gly Glu Leu	Gly Thr Ala Trp Val Arg	Asp Arg Val Asp
245	250	255
Ile Gln Ser Ala Tyr Pro	Phe Gln Ile Leu Leu Ala	Gly Gln Thr Gly
260	265	270
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275	280	285
Arg Pro Val Ser Glu Val	Ser Thr Leu Gln Pro Leu	Pro Pro Gly Pro
290	295	300
Arg Ala Pro Ala Pro Gln	Pro Leu Pro Pro Ser Ser	Arg Leu Gln Asp
305	310	315
Ser Cys Lys Gln Gly His	Leu Ala Cys Gly Asp Leu	Cys Val Pro Pro
325	330	335
Glu Gln Leu Cys Asp Phe	Glu Glu Gln Cys Ala Gly	Gly Glu Asp Glu
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355	360	365
Glu Asp Ala Ser Val Gly	Arg Leu Gln Trp Arg Arg	Val Ser Ala Gln
370	375	380
Glu Ser Gln Gly Ser Ser	Ala Ala Ala Ala Gly His	Phe Leu Ser Leu
385	390	395
Gln Arg Ala Trp Gly Gln	Leu Gly Ala Glu Ala Arg	Val Leu Thr Pro
405	410	415
Leu Leu Gly Pro Ser Gly	Pro Ser Cys Glu Leu His	Leu Ala Tyr Tyr
420	425	430
Leu Gln Ser Gln Pro Arg	Ala Gly Phe Val Gly Leu	Val Asp Leu Asp
435	440	445
Gly Pro Asp Gln Gln Xaa	Ser Trp Gly Gly Gln Arg	Asp Pro Glu Gly
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Leu		
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<210> 5089

<211> 793

<212> DNA

<213> Homo sapiens

<400> 5089

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<210> 5090

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5090

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Thr	His	Cys	Ser	Arg	His	Gly	Ser	Gly	Pro	Asn	Ile	Ile	Leu	Thr	Gly
			20					25					30		
Asp	Ser	Ser	Pro	Gly	Phe	Ser	Lys	Glu	Ile	Ala	Ala	Ala	Leu	Ala	Gly
		35					40					45			
Val	Pro	Gly	Phe	Glu	Val	Ser	Ala	Ala	Gly	Leu	Glu	Leu	Gly	Leu	Gly
		50				55					60				
Leu	Glu	Asp	Glu	Leu	Arg	Met	Glu	Pro	Leu	Gly	Leu	Glu	Gly	Leu	Asn
65					70					75					80
Met	Leu	Ser	Asp	Pro	Cys	Ala	Leu	Leu	Pro	Asp	Pro	Ala	Val	Glu	Glu
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<210> 5091

<211> 3150

<212> DNA

<213> Homo sapiens

<400> 5091

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<210> 5092

<211> 632

<212> PRT

<213> Homo sapiens

<400> 5092

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Ser His Thr Pro Phe Pro Lys Leu Glu Leu Gly Leu Gly Pro Gln Pro
      35          40          45
Met Ala Pro Arg Glu Leu Pro Thr Cys Ser Ile Cys Leu Glu Arg Leu
      50          55          60
Arg Asp Pro Ile Ser Leu Asp Cys Gly His Asp Phe Cys Ile Arg Cys
      65          70          75          80
Phe Ser Thr His Arg Leu Pro Gly Cys Glu Pro Pro Cys Cys Pro Glu
      85          90          95
Cys Arg Lys Ile Cys Lys Gln Lys Arg Gly Leu Arg Ser Leu Gly Glu
      100          105          110
Lys Met Lys Leu Leu Pro Gln Arg Pro Leu Pro Pro Ala Leu Gln Glu
      115          120          125
Thr Cys Pro Val Arg Ala Glu Pro Leu Leu Leu Val Arg Ile Asn Ala
      130          135          140
Ser Gly Gly Leu Ile Leu Arg Met Gly Ala Ile Asn Arg Cys Leu Lys
      145          150          155          160
His Pro Leu Ala Arg Asp Thr Pro Val Cys Leu Leu Ala Val Leu Gly
      165          170          175
Glu Gln His Ser Gly Lys Ser Phe Leu Leu Asn His Leu Leu Gln Gly
      180          185          190
Leu Pro Gly Leu Glu Ser Gly Glu Gly Gly Arg Pro Arg Gly Gly Glu
      195          200          205
Ala Ser Leu Gln Gly Cys Arg Trp Gly Ala Asn Gly Leu Ala Gly Gly
      210          215          220
Ile Trp Met Trp Ser His Pro Phe Leu Leu Gly Lys Glu Gly Lys Lys
      225          230          235          240
Val Ala Val Phe Leu Val Asp Thr Gly Asp Ala Met Ser Pro Glu Leu
      245          250          255
Ser Arg Glu Thr Arg Ile Lys Leu Cys Ala Leu Thr Thr Met Leu Ser
      260          265          270
Ser Tyr Gln Ile Leu Ser Thr Ser Gln Glu Leu Lys Asp Thr Asp Leu
      275          280          285
Asp Tyr Leu Glu Met Phe Val His Val Ala Glu Val Met Gly Lys His
      290          295          300
Tyr Gly Met Val Pro Ile Gln His Leu Asp Leu Leu Val Arg Asp Ser
      305          310          315          320
Ser His Pro Asn Lys Ala Gly Gln Gly His Val Gly Asn Ile Phe Gln
      325          330          335
Arg Leu Ser Gly Arg Tyr Pro Lys Val Gln Glu Leu Leu Gln Gly Lys
      340          345          350
Arg Ala Arg Cys Cys Leu Leu Pro Ala Pro Gly Arg Arg Met Asn
      355          360          365
Gln Gly His Ala Ser Pro Gly Gly Asp Thr Asp Asp Asp Phe Arg His
      370          375          380
Leu Leu Gly Ala Tyr Val Ser Asp Val Leu Ser Ala Ala Pro Gln His

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<210> 5093
<211> 1662
<212> DNA
<213> Homo sapiens
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<210> 5094

<211> 365

<212> PRT

<213> Homo sapiens

<400> 5094

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		20						25					30		
Asp	Val	Val	Lys	Val	Arg	Leu	Gln	Ser	Gln	Arg	Pro	Ser	Met	Ala	Ser
		35				40					45				
Glu	Leu	Met	Pro	Ser	Ser	Arg	Leu	Trp	Ser	Leu	Ser	Tyr	Thr	Lys	Leu

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Pro Ser Leu Ser Tyr Thr Lys Trp Lys Cys Leu Leu Tyr Cys Asn Gly		
65	70	75
Val Leu Glu Pro Leu Tyr Leu Cys Pro Asn Gly Ala Arg Cys Ala Thr		80
	85	90
Trp Phe Gln Asp Pro Thr Arg Phe Thr Gly Thr Met Asp Ala Phe Val		95
	100	105
Lys Ile Val Arg His Glu Gly Thr Arg Thr Leu Trp Ser Gly Leu Pro		110
	115	120
Ala Thr Leu Val Met Thr Val Pro Ala Thr Ala Ile Tyr Phe Thr Ala		125
	130	135
Tyr Asp Gln Leu Lys Ala Phe Leu Cys Gly Arg Ala Leu Thr Ser Asp		140
145	150	155
Leu Tyr Ala Pro Met Val Ala Gly Ala Leu Ala Arg Leu Gly Thr Val		160
	165	170
Thr Val Ile Ser Pro Leu Glu Leu Met Arg Thr Lys Leu Gln Ala Gln		175
	180	185
His Val Ser Tyr Arg Glu Leu Gly Ala Cys Val Arg Thr Ala Val Ala		190
	195	200
Gln Gly Gly Trp Arg Ser Leu Trp Leu Gly Trp Gly Pro Thr Ala Leu		205
	210	215
Arg Asp Val Pro Phe Ser Val His Pro Pro Pro Gln Ala Leu Tyr Trp		220
225	230	235
Phe Asn Tyr Glu Leu Val Lys Ser Trp Leu Asn Gly Leu Arg Pro Lys		240
	245	250
Asp Gln Thr Ser Val Gly Met Ser Phe Val Ala Gly Gly Ile Ser Gly		255
	260	265
Thr Val Ala Val Leu Thr Leu Pro Phe Asp Val Val Lys Thr Gln		270
	275	280
Arg Gln Val Ala Leu Gly Ala Met Glu Ala Val Arg Val Asn Pro Leu		285
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His Val Asp Ser Thr Trp Leu Leu Leu Arg Arg Ile Arg Ala Glu Ser		300
305	310	315
Gly Thr Lys Gly Leu Phe Ala Gly Phe Leu Pro Arg Ile Ile Lys Ala		320
	325	330
Ala Pro Ser Cys Ala Ile Met Ile Ser Thr Tyr Glu Phe Gly Lys Ser		335
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<210> 5095

<211> 2230

<212> DNA

<213> Homo sapiens

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<211> 153

<212> PRT

<213> Homo sapiens

<400> 5096

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<212> DNA

<213> Homo sapiens

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<210> 5098

<211> 114

<212> PRT

<213> Homo sapiens

<400> 5098

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<212> DNA

<213> Homo sapiens

<400> 5101

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<211> 436

<212> PRT

<213> Homo sapiens

<400> 5102

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 Thr Ile Leu Glu Ala Thr His Arg Asn Gln Ser Ser Glu Asn Lys Arg
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<212> PRT
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Glu Gly Ala Arg Arg Pro Ala Gly Leu Ala Gly Pro Gly Ser Ser Leu
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Thr Ala Gly Trp Thr Ala Phe Arg Thr Cys Pro Gly Cys Ser Ala Phe
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Val Ala Gly Ser Asn Trp Arg Asn Leu Glu Arg Gly Ser Cys Ala Cys
115 120 125
Lys Asp Gly Phe Cys Val Ser Ser Gly Phe Leu Leu Ser Gly Pro Gly
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<211> 1359
<212> DNA
<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 5106

Met	Ala	Gly	His	Gln	His	Thr	Trp	Gln	Ala	Gly	Ser	Thr	His	Gln	Leu
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			20					25						30	
Gly	Asp	Val	Ile	Cys	Tyr	Tyr	Gly	Asn	Arg	Gly	Glu	Pro	Asp	Pro	Ile
			35				40					45			
Val	Leu	Thr	Pro	Gly	Thr	Tyr	Gly	Leu	Ser	Asn	Ala	Leu	Leu	Glu	Thr
			50			55					60				
Pro	Trp	Arg	Lys	Leu	Cys	Phe	Gly	Lys	Gln	Leu	Phe	Leu	Glu	Ala	Val
					70				75					80	
Glu	Arg	Ser	Gln	Ala	Leu	Pro	Lys	Asp	Val	Leu	Ile	Ala	Ser	Leu	Leu
			85					90						95	
Asp	Val	Leu	Asn	Glu	Glu	Ala	Gln	Leu	Pro	Asp	Pro	Ala	Ile	Glu	
			100				105					110			
Asp	Gln	Gly	Glu	Tyr	Val	Gln	Pro	Met	Leu	Ser	Lys	Tyr	Ala	Ala	
			115			120					125				
Val	Cys	Val	Arg	Cys	Pro	Gly	Tyr	Gly	Thr	Arg	Thr	Asn	Thr	Ile	Ile

4293

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1207

<210> 5108
<211> 83
<212> PRT
<213> Homo sapiens

<400> 5108
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20 25 30
Val Gln Trp Arg Asn Leu Ser Ser Leu Gln Pro Pro Pro Gly Phe
35 40 45
Lys Arg Phe Ser Cys Leu Ser Leu Leu Ser Ser Trp Asp Tyr Arg Arg
50 55 60
Val Pro Pro Cys Pro Ala Asn Phe Cys Ile Phe Ser Arg Asp Arg Val
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Ser Pro Cys

<210> 5109
<211> 651
<212> DNA
<213> Homo sapiens

<400> 5109
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120
caagcatggc aggaagcttc agataattgt tttatggatt ctgacatcaa agtacttgaa
180
gatcagtttg atgaaatcat agtagatata gccacaaaac gtaagcagta tcccagaaag
240
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300
cctgttgtag atccactgga cctaaaatat gaccctgac cagttctcaa cggaatgct
360
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420
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480
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540
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651

<210> 5110
<211> 206
<212> PRT

<213> Homo sapiens

<400> 5110

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      20           25           30
Gln Glu Ala Ser Asp Asn Cys Phe Met Asp Ser Asp Ile Lys Val Leu
      35           40           45
Glu Asp Gln Phe Asp Glu Ile Ile Val Asp Ile Ala Thr Lys Arg Lys
      50           55           60
Gln Tyr Pro Arg Lys Ile Leu Glu Cys Val Ile Lys Thr Ile Lys Ala
      65           70           75           80
Lys Gln Glu Ile Leu Lys Gln Tyr His Pro Val Val His Pro Leu Asp
      85           90           95
Leu Lys Tyr Asp Pro Asp Pro Val Leu Asn Gly Asn Ala Phe Asn Phe
      100          105          110
Ser Pro Phe Asn Met Met Leu Ala Val Asp Leu Ser Tyr Met Val Phe
      115          120          125
Ile Thr Ser Ala Pro His Met Glu Asn Leu Lys Cys Arg Gly Glu Thr
      130          135          140
Val Ala Lys Glu Ile Ser Glu Ala Met Lys Ser Leu Pro Ala Leu Ile
      145          150          155          160
Glu Gln Gly Glu Gly Phe Ser Gln Val Leu Arg Met Gln Pro Val Ile
      165          170          175
His Leu Gln Arg Ile His Gln Glu Val Phe Ser Ser Cys His Arg Lys
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Pro Asp Ala Lys Pro Glu Asn Phe Ile Thr Gln Ile Glu Thr
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<210> 5111

<211> 2247

<212> DNA

<213> Homo sapiens

<400> 5111

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420
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480
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540

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gagacctttg atgcagctgt gcgcgagaac atcgaggagt ttgcgatggg gccagaggag
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660
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780
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2100
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2160

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<210> 5112

<211> 581

<212> PRT

<213> Homo sapiens

<400> 5112

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Arg	Gly	Gly	Lys	Asp	Ala	Ser	Val	Ala	His	Glu	Val	Ala	Ser	Leu	Ala
			20					25					30		
Leu	Pro	Trp	Phe	Ala	Val	Val	Leu	Gly	Tyr	Arg	Glu	Arg	Pro	Arg	Val
		35					40					45			
Ser	Gly	Arg	Pro	Ser	Leu	Gly	Ala	Pro	Gln	Arg	Leu	Arg	Ala	Tyr	Gly
	50					55				60					
Gly	Arg	Lys	Gly	Leu	Glu	Ala	Ala	Pro	Trp	Val	Thr	Thr	Ala	Arg	Pro
65				70						75				80	
Thr	Phe	Pro	His	Val	Ala	Ala	Lys	Thr	Gly	Ser	Gly	Ala	Ser	Ile	Gly
				85					90					95	
Cys	Thr	Pro	Thr	Ser	Thr	Gln	Ala	Lys	Met	Val	Ser	Lys	Arg	Ile	Ala
				100				105					110		
Gln	Glu	Thr	Phe	Asp	Ala	Ala	Val	Arg	Glu	Asn	Ile	Glu	Glu	Phe	Ala
		115					120					125			
Met	Gly	Pro	Glu	Glu	Ala	Val	Lys	Glu	Ala	Val	Glu	Gln	Phe	Glu	Ser
	130					135					140				
Gln	Gly	Val	Asp	Leu	Ser	Asn	Ile	Val	Lys	Thr	Ala	Pro	Lys	Val	Ser
145				150						155				160	
Ala	Asp	Gly	Ser	Gln	Glu	Pro	Thr	His	Asp	Ile	Leu	Gln	Met	Leu	Ser
				165					170					175	
Asp	Leu	Gln	Glu	Ser	Val	Ala	Ser	Ser	Arg	Pro	Gln	Glu	Val	Ser	Ala
			180					185					190		
Tyr	Leu	Thr	Arg	Phe	Cys	Asp	Gln	Cys	Lys	Gln	Asp	Lys	Ala	Cys	Arg
		195					200					205			
Phe	Leu	Ala	Ala	Gln	Lys	Gly	Ala	Tyr	Pro	Ile	Ile	Phe	Thr	Ala	Arg
	210					215					220				
Lys	Leu	Ala	Thr	Ala	Gly	Asp	Gln	Gly	Leu	Leu	Leu	Gln	Ser	Leu	Asn
225				230						235				240	
Ala	Leu	Ser	Val	Leu	Thr	Asp	Gly	Gln	Pro	Asp	Leu	Leu	Asp	Ala	Gln
				245					250					255	
Gly	Leu	Gln	Leu	Leu	Val	Ala	Thr	Leu	Thr	Gln	Asn	Ala	Asp	Glu	Ala
			260					265					270		
Asp	Leu	Thr	Cys	Ser	Gly	Ile	Arg	Cys	Val	Arg	His	Ala	Cys	Leu	Lys
		275					280					285			
His	Glu	Gln	Asn	Arg	Gln	Asp	Leu	Val	Lys	Ala	Gly	Val	Leu	Pro	Leu
	290					295					300				
Leu	Thr	Gly	Ala	Ile	Thr	His	His	Gly	His	His	Thr	Asp	Val	Val	Arg
305				310							315			320	
Glu	Ala	Cys	Trp	Ala	Leu	Arg	Val	Met	Thr	Phe	Asp	Asp	Asp	Ile	Arg
				325					330					335	
Val	Pro	Phe	Gly	His	Ala	His	Asn	His	Ala	Lys	Met	Ile	Val	Gln	Glu

340 345 350
 Asn Lys Gly Leu Lys Val Leu Ile Glu Ala Thr Lys Ala Phe Leu Asp
 355 360 365
 Asn Pro Gly Ile Leu Ser Glu Leu Cys Gly Thr Leu Ser Arg Leu Ala
 370 375 380
 Ile Arg Asn Glu Phe Cys Gln Glu Val Val Asp Leu Gly Gly Leu Ser
 385 390 395 400
 Ile Leu Val Ser Leu Leu Ala Asp Cys Asn Asp His Gln Met Arg Asp
 405 410 415
 Gln Ser Gly Val Gln Glu Leu Val Lys Gln Val Leu Ser Thr Leu Arg
 420 425 430
 Ala Ile Ala Gly Asn Asp Asp Val Lys Asp Ala Ile Val Arg Ala Gly
 435 440 445
 Gly Thr Glu Ser Ile Val Ala Ala Met Thr Gln His Leu Thr Ser Pro
 450 455 460
 Gln Val Trp Glu Gln Ser Cys Ala Ala Leu Cys Phe Leu Ala Leu Arg
 465 470 475 480
 Lys Pro Asp Asn Ser Arg Ile Ile Val Glu Gly Gly Gly Ala Val Ala
 485 490 495
 Ala Leu Gln Ala Met Lys Ala His Pro Gln Lys Ala Gly Val Gln Lys
 500 505 510
 Gln Ala Cys Met Leu Ile Arg Asn Leu Val Ala His Gly Gln Ala Phe
 515 520 525
 Ser Lys Pro Ile Leu Asp Leu Gly Ala Glu Ala Leu Ile Met Gln Ala
 530 535 540
 Arg Ser Ala His Arg Asp Cys Glu Asp Val Ala Lys Ala Ala Leu Arg
 545 550 555 560
 Asp Leu Gly Cys His Val Glu Leu Arg Glu Leu Trp Thr Gly Gln Arg
 565 570 575
 Gly Asn Leu Ala Pro
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<210> 5113
 <211> 472
 <212> DNA
 <213> Homo sapiens

<400> 5113
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 120
 attggcacgc agcgcggagc ctggcacctg cagtgtagac aactggcca ccgctcagtg
 180
 caagagggcc cctttgctaa tgtgcacagc tctttatgcc ttttttcccta tgcctttttg
 240
 gattggagca agagattttt ttttccaagt aaagaacaat ttatgttcct aaatactttt
 300
 tttccttgac atgatgaagt tgagcaaggt ggctatagaa ctttttttct taattttatt
 360
 gcccaagtaa tggtctttac aaagtaggga aatacagata cataaaaaga agactgcca
 420
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 472

<210> 5114
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 5114
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 20 25 30
 Met His Leu Thr Pro Val Ile Gly Thr Gln Arg Gly Ala Trp His Leu
 35 40 45
 Gln Cys Arg His Thr Gly His Arg Ser Val Gln Glu Gly Pro Phe Ala
 50 55 60
 Asn Val His Ser Ser Leu Cys Leu Phe Ser Tyr Ala Phe Leu Asp Trp
 65 70 75 80
 Ser Lys Arg Phe Phe Phe Pro Ser Lys Glu Gln Phe Met Phe Leu Asn
 85 90 95
 Thr Phe Phe Pro
 100

<210> 5115
 <211> 1003
 <212> DNA
 <213> Homo sapiens

<400> 5115
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 120
 tccaaagcct gcctggggat ttgtgcccaa gccagccca ggagggttag agaaagcaaa
 180
 ggtgtctacc agccgccgcc atcccagaag gaaagcctct tcccatgagt gcctgtgggt
 240
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 300
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 360
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 420
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 480
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 540
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 600
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 660
 caccaccacc ccgaccaggg tgatgaggaa gaagggcccc aacacatagc ccaccatgga
 720
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 780

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<210> 5116

<211> 226

<212> PRT

<213> Homo sapiens

<400> 5116

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Arg	Gly	Ser	Gln	Val	Thr	Ala	Gly	Glu	Ala	Asp	Gly	Arg	Ala	Pro	Gly
			20					25					30		
Ser	Pro	Gly	Pro	Gln	Ala	Leu	Lys	Gly	Gly	Ala	Arg	Gly	Ser	Gly	His
		35					40					45			
Val	Leu	Thr	Ser	Ser	Ser	Gly	Ser	Ala	Cys	Ala	Gly	Ser	Pro	Leu	Cys
	50					55					60				
Pro	Ala	Met	Ser	His	Leu	Gly	Val	Ser	His	Val	Arg	Glu	Gln	Leu	Leu
65					70					75				80	
Leu	Ser	Ile	Met	Gln	Phe	Leu	Ser	Trp	Val	Ile	Ala	Val	His	Gly	Glu
				85					90					95	
Gln	Val	His	Ala	Gln	Pro	Val	His	Pro	Leu	Phe	Leu	Leu	Tyr	Ile	His
			100					105					110		
Tyr	His	Ser	His	His	His	Pro	Asp	Gln	Gly	Asp	Glu	Glu	Glu	Gly	Pro
		115					120					125			
Gln	His	Ile	Ala	His	His	Gly	Val	Ala	Val	Gly	Leu	Gly	Gly	Ile	Gly
	130					135					140				
His	Ser	Gly	Val	Thr	His	Asp	Ile	Ser	Ser	Arg	Arg	Ala	Gly	Trp	Ser
145					150					155				160	
Ala	Trp	Ala	Val	Ala	Leu	Arg	Glu	Gly	Ala	Ser	Thr	Gly	Leu	Pro	Ser
				165					170					175	
Arg	Met	Leu	Ile	Val	Pro	Gly	Gln	Gly	Gly	Met	Pro	Gly	Trp	Gly	Gly
		180					185					190			
Arg	Gln	Ala	Ala	Ala	Arg	Met	Arg	Ala	Ser	Asn	Ser	Gly	Xaa	Gly	Gly
		195					200					205			
Gly	Ser	His	Gly	Ala	Gly	Xaa	Ala	His	Ala	Gly	Gly	Gly	Gly	Val	Gly
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Gly	Cys														
225															

<210> 5117

<211> 1180

<212> DNA

<213> Homo sapiens

<400> 5117

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 120
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 240
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 300
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 360
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 420
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 480
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 660
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 720
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 780
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 1180

<210> 5118

<211> 300

<212> PRT

<213> Homo sapiens

<400> 5118

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Thr	Gly	Ser	Gly	Lys	Ser	Ala	Thr	Ala	Asn	Thr	Ile	Leu	Gly	Glu	Glu
		20					25				30				
Ile	Phe	Asp	Ser	Arg	Ile	Ala	Ala	Gln	Ala	Val	Thr	Lys	Asn	Cys	Gln
	35					40				45					
Lys	Ala	Ser	Arg	Glu	Trp	Gln	Gly	Arg	Asp	Leu	Leu	Val	Val	Asp	Thr
	50					55				60					
Pro	Gly	Leu	Phe	Asp	Thr	Lys	Glu	Ser	Leu	Asp	Thr	Thr	Cys	Lys	Glu

65					70					75					80
Ile	Ser	Arg	Cys	Ile	Ile	Ser	Ser	Cys	Pro	Gly	Pro	His	Ala	Ile	Val
				85					90					95	
Leu	Val	Leu	Leu	Leu	Gly	Arg	Tyr	Thr	Glu	Glu	Glu	Gln	Lys	Thr	Val
				100					105					110	
Ala	Leu	Ile	Lys	Ala	Val	Phe	Gly	Lys	Ser	Ala	Met	Lys	His	Met	Val
				115					120					125	
Ile	Leu	Phe	Thr	Arg	Lys	Glu	Glu	Leu	Glu	Gly	Gln	Ser	Phe	His	Asp
				130					135					140	
Phe	Ile	Ala	Asp	Ala	Asp	Val	Gly	Leu	Lys	Ser	Ile	Val	Lys	Glu	Cys
				145					150					155	
Gly	Asn	Arg	Cys	Cys	Ala	Phe	Ser	Asn	Ser	Lys	Lys	Thr	Ser	Lys	Ala
				165					170					175	
Glu	Lys	Glu	Ser	Gln	Val	Gln	Glu	Leu	Val	Glu	Leu	Ile	Glu	Lys	Met
				180					185					190	
Val	Gln	Cys	Asn	Glu	Gly	Ala	Tyr	Phe	Ser	Asp	Asp	Ile	Tyr	Lys	Asp
				195					200					205	
Thr	Glu	Glu	Arg	Leu	Lys	Gln	Arg	Glu	Glu	Val	Leu	Arg	Lys	Ile	Tyr
				210					215					220	
Thr	Asp	Gln	Leu	Asn	Glu	Ile	Lys	Leu	Val	Glu	Glu	Asp	Lys	His	
				225					230					235	
Lys	Ser	Glu	Glu	Glu	Lys	Glu	Lys	Glu	Ile	Lys	Leu	Leu	Lys	Leu	Lys
				245					250					255	
Tyr	Asp	Glu	Lys	Ile	Lys	Asn	Ile	Arg	Glu	Glu	Ala	Glu	Arg	Asn	Ile
				260					265					270	
Phe	Lys	Asp	Val	Phe	Asn	Arg	Ile	Trp	Lys	Met	Leu	Ser	Glu	Ile	Trp
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<211> 1450

<212> DNA

<213> Homo sapiens

<400> 5119

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<211> 314

<212> PRT

<213> Homo sapiens

<400> 5120

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		20						25					30		
Ile	Phe	Tyr	Phe	Leu	Thr	Leu	Ala	Gly	Asn	Met	Val	Ile	Val	Leu	Val
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Ser	Leu	Lys	Asp	Pro	Lys	Leu	His	Ile	Pro	Met	Tyr	Phe	Phe	Leu	Ser
	50					55				60					
Asn	Leu	Ser	Leu	Val	Asp	Leu	Cys	Leu	Thr	Ser	Ser	Cys	Val	Pro	Gln
65				70					75					80	
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			85					90					95		
Cys	Ala	Ile	Gln	Leu	Tyr	Val	Phe	Leu	Trp	Leu	Gly	Ala	Thr	Glu	Tyr
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<210> 5121
<211> 944
<212> DNA
<213> Homo sapiens
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<211> 172

<212> PRT

<213> Homo sapiens

<400> 5122

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		20						25					30		
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		35					40					45			
Glu	Glu	Lys	Asp	Pro	Arg	Arg	Cys	Leu	Glu	Glu	Gly	Lys	Leu	Val	Asn
		50					55				60				
Lys	Cys	Ala	Leu	Asp	Phe	Phe	Arg	Gln	Ile	Lys	Arg	His	Cys	Ala	Glu
65					70					75				80	
Pro	Phe	Thr	Glu	Tyr	Trp	Thr	Cys	Ile	Asp	Tyr	Thr	Gly	Gln	Gln	Leu
			85					90					95		
Phe	Arg	His	Cys	Arg	Lys	Gln	Gln	Ala	Lys	Phe	Asp	Glu	Cys	Val	Leu
			100					105					110		
Asp	Lys	Leu	Gly	Trp	Val	Arg	Pro	Asp	Leu	Gly	Glu	Leu	Ser	Lys	Val
		115					120					125			
Thr	Lys	Val	Lys	Thr	Asp	Arg	Pro	Leu	Pro	Glu	Asn	Pro	Tyr	His	Ser
		130				135					140				
Arg	Pro	Arg	Pro	Asp	Pro	Ser	Pro	Glu	Ile	Glu	Gly	Asp	Leu	Gln	Pro
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<211> 1139

<212> DNA

<213> Homo sapiens

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<210> 5124

<211> 101

<212> PRT

<213> Homo sapiens

<400> 5124

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			20					25					30		
Gln	Ala	Cys	Met	Leu	Ile	Arg	Asn	Leu	Val	Ala	His	Gly	Gln	Ala	Phe
		35					40					45			
Ser	Lys	Pro	Ile	Leu	Asp	Leu	Gly	Ala	Glu	Ala	Leu	Ile	Met	Gln	Ala
		50				55					60				
Arg	Ser	Ala	His	Arg	Asp	Cys	Glu	Asp	Val	Ala	Lys	Ala	Ala	Leu	Arg
65					70				75					80	
Asp	Leu	Gly	Cys	His	Val	Glu	Leu	Arg	Glu	Leu	Trp	Thr	Gly	Gln	Arg
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<210> 5125

<211> 6244

<212> DNA

<213> Homo sapiens

<400> 5125

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<210> 5126

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 <212> PRT
 <213> Homo sapiens

<400> 5126

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          20           25           30
Phe Ser Cys Ser Phe Cys Val Val Phe Arg Gly Gly Ser Pro His Ala
          35           40           45
Glu Ile Leu Cys Met Gln Pro Thr Gly Lys Arg Pro Pro Gly Ser Gln
          50           55           60
Asp Phe Ser Phe Ser Cys Leu Cys Pro Ala Thr Cys Ser Leu Pro Leu
65           70           75           80
Phe Arg Cys Gln Arg Gly Asp Phe Arg Ala Val Cys Phe Asn Pro Gly
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<210> 5127
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 <212> DNA
 <213> Homo sapiens

<400> 5127

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 <213> Homo sapiens

<400> 5129
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 120
 gctgacctga aaccagcacc tcctgtgtcc ccagctgagc cctgcacggg attggccaaa
 180
 tgtgtgtgtc tgcggccgcc ctgctgcccc cccctgggt ggagctggg tctgggacag
 240
 tgaagatggc tcccacagct gaggggcact gggtgccaag agcctgccag accctgggccc
 300
 acccagaaac atgctctgat agtgcagctg tgagcactgg cctgcgtccc ctccaccag
 360
 ccgacctatg aggctcaggg tgcttggggg cccatcaagg acatagtcct agctgccgac
 420
 tcatccaggc agcctgcaca accctgggt cccctccacc ggccacctgc cccctgcac
 480
 aggcaggatc cggcctcgcc caccacagc cctgcacctc cgggcccacg gcagcaagat
 540
 tcctatcttg gggatgcttt cctccctttg ccgagagacc cccccccc acaccttgcc
 600
 tctcttcaag gagccgaaaa tgcagctgcc gactgatttg ctgtggagct aaaaataact
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 720
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 745

<210> 5130
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 5130
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 Trp Ala Leu Ala Gly Ala Arg Gln Leu Phe Leu Ala Pro Gln Gln Ile
 20 25 30
 Ser Arg Gln Leu His Phe Arg Leu Leu Glu Glu Arg Gln Gly Val Gly
 35 40 45
 Gly Val Gly Leu Ser Ala Lys Gly Gly Lys His Pro Gln Asp Arg Asn
 50 55 60
 Leu Ala Ala Val Gly Pro Glu Val Gln Ala Cys Gly Trp Ala Arg Pro
 65 70 75 80
 Asp Pro Ala Cys Ala Gly Gly Gln Val Ala Gly Gly Gly Glu Pro Gly

				85					90					95
Val	Val	Gln	Ala	Ala	Trp	Met	Ser	Arg	Gln	Leu	Gly	Leu	Cys	Pro
			100					105					110	

<210> 5131
 <211> 789
 <212> DNA
 <213> Homo sapiens

<400> 5131
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 120
 taccagggcc gtgagctcta tgagcggcca ccccatctct atgctgtggc caacgccgcc
 180
 tacaaggcaa tgaagcaccg gtccagggac acctgcatcg tcattctcagg ggagagtggg
 240
 gcagggaaga cagaagccag taagcacatc atgcagtaca tcgctgctgt caccaatcca
 300
 agccagaggg ctgaggtgga gaggggtcaag gacgtgctgc tcaagtccac ctgtgtgctg
 360
 gaggcctttg gcaatgcccg caccaaccgc aatcacaact ccagccgctt tggcaagtac
 420
 atggacatca actttgactt caagggggac ccgatcggag gacacatcca cagctaccta
 480
 ctggagaagt ctcggttcct caagcagcac gtgggtgaaa gaaacttcca cgcttctac
 540
 caattgctga gaggcagtga ggacaagcag ctgcatgaac tgcacttgga gagaaaccct
 600
 gctgtataca atttcacaca ccaggagca ggactcaaca tgactgtgca cagtgccttg
 660
 gacagtgatg agcagagcca ccaggcagtg accgaggcca tgagggtcat cggttcagt
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 780
 gagtttgtg
 789

<210> 5132
 <211> 263
 <212> PRT
 <213> Homo sapiens

<400> 5132
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 1 5 10 15
 Ile Gly Glu Val Leu Val Ser Val Asn Pro Tyr Gln Glu Leu Pro Leu
 20 25 30
 Tyr Gly Pro Glu Ala Ile Ala Gln Tyr Gln Gly Arg Glu Leu Tyr Glu
 35 40 45
 Arg Pro Pro His Leu Tyr Ala Val Ala Asn Ala Ala Tyr Lys Ala Met
 50 55 60
 Lys His Arg Ser Arg Asp Thr Cys Ile Val Ile Ser Gly Glu Ser Gly

```

65          70          75          80
Ala Gly Lys Thr Glu Ala Ser Lys His Ile Met Gln Tyr Ile Ala Ala
          85          90          95
Val Thr Asn Pro Ser Gln Arg Ala Glu Val Glu Arg Val Lys Asp Val
          100          105          110
Leu Leu Lys Ser Thr Cys Val Leu Glu Ala Phe Gly Asn Ala Arg Thr
          115          120          125
Asn Arg Asn His Asn Ser Ser Arg Phe Gly Lys Tyr Met Asp Ile Asn
          130          135          140
Phe Asp Phe Lys Gly Asp Pro Ile Gly Gly His Ile His Ser Tyr Leu
145          150          155          160
Leu Glu Lys Ser Arg Val Leu Lys Gln His Val Gly Glu Arg Asn Phe
          165          170          175
His Ala Phe Tyr Gln Leu Leu Arg Gly Ser Glu Asp Lys Gln Leu His
          180          185          190
Glu Leu His Leu Glu Arg Asn Pro Ala Val Tyr Asn Phe Thr His Gln
          195          200          205
Gly Ala Gly Leu Asn Met Thr Val His Ser Ala Leu Asp Ser Asp Glu
210          215          220
Gln Ser His Gln Ala Val Thr Glu Ala Met Arg Val Ile Gly Phe Ser
225          230          235          240
Pro Glu Glu Val Glu Ser Val His Arg Ile Leu Ala Ala Ile Leu His
          245          250          255
Leu Gly Asn Ile Glu Phe Val
          260

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<210> 5133

<211> 581

<212> DNA

<213> Homo sapiens

<400> 5133

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120
tgaccgacca gacagaaatg ttcggcagcc tcaggaaggt ttttgaaaaa ggccacccca
180
gaggtggagt ggacaggagc attaccacct cagccaccct gaccactatc atcaccatgg
240
aaaaagtgtac ttgagcagag gctctcccta tagagaatct cctttgggtc attttgaaag
300
ctatggaggg atgccctttt tccaggtcca gaagatgttt gttgatgtac cagaaaatac
360
agtgatactg gatgagatga cccttcggca catggttcag gattgcactg ctgtaaaaac
420
tcagttactc aaactgaaac gtctcctgca tcagcatgat ggaagtgggt cattgcatga
480
tattcaactg tcattgccat ccagtccaga accagaagat ggtgataaag tatataagaa
540
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581

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<210> 5134

<211> 157
 <212> PRT
 <213> Homo sapiens

<400> 5134

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Met Asn Arg Phe Asp Arg Pro Asp Arg Asn Val Arg Gln Pro Gln Glu
 1           5           10           15
Gly Phe Trp Lys Arg Pro Pro Gln Arg Trp Ser Gly Gln Glu His Tyr
      20           25           30
His Leu Ser His Pro Asp His Tyr His His His Gly Lys Ser Asp Leu
      35           40           45
Ser Arg Gly Ser Pro Tyr Arg Glu Ser Pro Leu Gly His Phe Glu Ser
      50           55           60
Tyr Gly Gly Met Pro Phe Phe Gln Ala Gln Lys Met Phe Val Asp Val
65           70           75           80
Pro Glu Asn Thr Val Ile Leu Asp Glu Met Thr Leu Arg His Met Val
      85           90           95
Gln Asp Cys Thr Ala Val Lys Thr Gln Leu Leu Lys Leu Lys Arg Leu
      100          105          110
Leu His Gln His Asp Gly Ser Gly Ser Leu His Asp Ile Gln Leu Ser
      115          120          125
Leu Pro Ser Ser Pro Glu Pro Glu Asp Gly Asp Lys Val Tyr Lys Asn
      130          135          140
Glu Asp Leu Leu Asn Glu Ile Lys Gln Leu Lys Asp Glu
145          150          155

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<210> 5135
 <211> 1696
 <212> DNA
 <213> Homo sapiens

<400> 5135

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aaagcggcgc agctgccctg ggaggacggc aggtccgggt tgctctccgg cggcctccct
120
cggaagtgtt ccgtcttcca cctgttcgtg gcctgcctct cgctgggctt cttctcccta
180
ctctggctgc agctcagctg ctctggggac gtggcccggg cagtcagggg acaagggcag
240
gagacctcgg gccctccccg cgctgcccc ccagagccgc ccctgagca ctgggaagaa
300
gacgcacctt ggggccccca ccgcctggca gtgctggtgc cttccgca acgcttcgag
360
gagctcctgg tcttcgtgcc ccacatgcgc cgcttcctga gcaggaagaa gatccggcac
420
cacatctacg tgctcaacca ggtggaccac ttcaggttca accgggcagc gtcacatcaac
480
gtgggcttcc tggagagcag caacagcacg gactacattg ccatgcacga cgttgacctg
540
ctccctctca acgaggagct ggactatggc tttcctgagg ctgggccctt ccacgtggcc
600
tccccggagc tccacctct ctaccactac aagacctatg tcggcgccat cctgctgctc
660

```

tccaagcagc actaccggct gtgcaatggg atgtccaacc gtttctgggg ctggggccgc
 720
 gaggacgacg agttctaccg gcgcattaag ggagctgggc tccagctttt ccgcccctcg
 780
 ggaatcacia ctgggtacaa gacatttcgc cacctgcacg acccagcctg gcggaagagg
 840
 gaccagaagc gcatcgcagc tcaaaaacag gagcagttca aggtggacag ggagggaggc
 900
 ctgaacactg tgaagtacca tgtggcttcc cgcactgccc tgtctgtggg cggggccccc
 960
 tgcactgtcc tcaacatcat gttggactgt gacaagaccg ccacaccctg gtgcacattc
 1020
 agctgagctg gatggacagt gaggaagcct gtacctacag gccatattgc tcaggctcag
 1080
 gacaaggcct caggctcgtg gccagctct gacaggatgt ggagtggcca ggaccaagac
 1140
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 1200
 cgtgggggtg ctgggacgct gcttgccatg cacagtgatc agagagaggc tgggggtgtgt
 1260
 cctgtccggg accccccctg ccttctgct caccctactc tgacctcctt cacgtgcccc
 1320
 ggccctgtgg tagtggggag ggctgaacag gacaacctct catcaccccc acttttgttc
 1380
 ctctctgctg ggctgcctcg tgcagagaca cagtgtaggg gccatgcagc tggcgtaggt
 1440
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 1500
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 1560
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 1680
 aaaaaaaaaa aaaaaa
 1696

<210> 5136

<211> 341

<212> PRT

<213> Homo sapiens

<400> 5136

Xaa	Cys	Glu	Arg	Leu	Pro	His	Ala	Pro	Pro	Pro	Leu	Arg	Thr	Met	Phe
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Pro	Ser	Arg	Arg	Lys	Ala	Ala	Gln	Leu	Pro	Trp	Glu	Asp	Gly	Arg	Ser
			20				25						30		
Gly	Leu	Leu	Ser	Gly	Gly	Leu	Pro	Arg	Lys	Cys	Ser	Val	Phe	His	Leu
			35			40						45			
Phe	Val	Ala	Cys	Leu	Ser	Leu	Gly	Phe	Phe	Ser	Leu	Leu	Trp	Leu	Gln
	50				55					60					
Leu	Ser	Cys	Ser	Gly	Asp	Val	Ala	Arg	Ala	Val	Arg	Gly	Gln	Gly	Gln
65				70				75						80	
Glu	Thr	Ser	Gly	Pro	Pro	Arg	Ala	Cys	Pro	Pro	Glu	Pro	Pro	Pro	Glu

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<210> 5137
<211> 3090
<212> DNA
<213> Homo sapiens
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<400> 5137
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120
ggtgcgaggc ggcanagggc cgtcccctac atttgcatag cccctgggac gtggcgctgc
180
acccaagcct cttctcagtt ggagggaact ccaagtccca cagtgccacg ggggtggggtg
240
cgtcactttc gctgcgttgg aggctgagga gaattgagcc tgggaggcgg gtcgggagag
300
ggctatggaa agccgccggc ggggaatccc ggccgtagag ggacagtgga taggtgcccc
360
aggcctacag ctggcctggg gctcgtgtct gggcttcgga cgttggggcc cgggtggccca
420
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ccctttccgt agttgtccca aatggagctg gaattggatg ctggtgacca agacctgctg
480
gccttcctgc tagaggaaag tggagatttg gggacggcac ccgatgaggc cgtgagggcc
540
ccactggact gggcgctgcc gctttctgag gtaccgagcg actgggaagt agatgatttg
600
ctgtgctccc tgctgagtc cccagcgctg ttgaacattc tcagctcctc caaccctgc
660
cttgtccacc atgaccacac ctactccctc ccacgggaaa ctgtctctat ggatctagag
720
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780
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840
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900
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960
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1020
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 2760
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 2880
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 2940
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 3000
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 3090

<210> 5138

<211> 371

<212> PRT

<213> Homo sapiens

<400> 5138

Met Glu Leu Glu Leu Asp Ala Gly Asp Gln Asp Leu Leu Ala Phe Leu
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 Leu Glu Glu Ser Gly Asp Leu Gly Thr Ala Pro Asp Glu Ala Val Arg
 20 25 30
 Ala Pro Leu Asp Trp Ala Leu Pro Leu Ser Glu Val Pro Ser Asp Trp
 35 40 45
 Glu Val Asp Asp Leu Leu Cys Ser Leu Leu Ser Pro Pro Ala Ser Leu
 50 55 60
 Asn Ile Leu Ser Ser Ser Asn Pro Cys Leu Val His His Asp His Thr
 65 70 75 80
 Tyr Ser Leu Pro Arg Glu Thr Val Ser Met Asp Leu Glu Ser Glu Ser

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<210> 5139
<211> 1968
<212> DNA
<213> Homo sapiens
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4320

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420
ccagaaggct acaatctgaa agatgaggag ggccggctcc gggatcctgc caccatcaca
480
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1860
caggctcagg cggccccact caccacagc atccgccgc accccttcgg gtgtgagcgc
1920

tcaataaaaa caacacacta taaagtgttt ttaaattccaa aaaaaaaa
1968

<210> 5140

<211> 443

<212> PRT

<213> Homo sapiens

<400> 5140

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Met Glu Glu Asp Ile Asp Thr Arg Lys Ile Asn Asn Ser Phe Leu Arg
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Asp His Ser Tyr Ala Thr Glu Ala Asp Ile Ile Ser Thr Val Glu Phe
          20          25          30
Asn His Thr Gly Glu Leu Leu Ala Thr Gly Asp Lys Gly Gly Arg Val
          35          40          45
Val Ile Phe Gln Arg Glu Gln Glu Ser Lys Asn Gln Val His Arg Arg
          50          55          60
Gly Glu Tyr Asn Val Tyr Ser Thr Phe Gln Ser His Glu Pro Glu Phe
65          70          75          80
Asp Tyr Leu Lys Ser Leu Glu Ile Glu Glu Lys Ile Asn Lys Ile Arg
          85          90          95
Trp Leu Pro Gln Gln Asn Ala Ala Tyr Phe Leu Leu Ser Thr Asn Asp
          100          105          110
Lys Thr Val Lys Leu Trp Lys Val Ser Glu Arg Asp Lys Arg Pro Glu
          115          120          125
Gly Tyr Asn Leu Lys Asp Glu Glu Gly Arg Leu Arg Asp Pro Ala Thr
          130          135          140
Ile Thr Thr Leu Arg Val Pro Val Leu Arg Pro Met Asp Leu Met Val
145          150          155          160
Glu Ala Thr Pro Arg Arg Val Phe Ala Asn Ala His Thr Tyr His Ile
          165          170          175
Asn Ser Ile Ser Val Asn Ser Asp Tyr Glu Thr Tyr Met Ser Ala Asp
          180          185          190
Asp Leu Arg Ile Asn Leu Trp Asn Phe Glu Ile Thr Asn Gln Ser Phe
          195          200          205
Asn Ile Val Asp Ile Lys Pro Ala Asn Met Glu Glu Leu Thr Glu Val
          210          215          220
Ile Thr Ala Ala Glu Phe His Pro His His Cys Asn Thr Phe Val Tyr
225          230          235          240
Ser Ser Ser Lys Gly Thr Ile Arg Leu Cys Asp Met Arg Ala Ser Ala
          245          250          255
Leu Cys Asp Arg His Thr Lys Phe Phe Glu Glu Pro Glu Asp Pro Ser
          260          265          270
Asn Arg Ser Phe Phe Ser Glu Ile Ile Ser Ser Ile Ser Asp Val Lys
          275          280          285
Phe Ser His Ser Gly Arg Tyr Ile Met Thr Arg Asp Tyr Leu Thr Val
          290          295          300
Lys Val Trp Asp Leu Asn Met Glu Ser Arg Pro Val Glu Thr His Gln
305          310          315          320
Val His Asp Tyr Leu Arg Ser Lys Leu Cys Ser Leu Tyr Glu Asn Asp
          325          330          335
Cys Ile Phe Asp Lys Phe Glu Cys Val Trp Asn Gly Ser Asp Ser Val
          340          345          350
Ile Met Thr Gly Ser Tyr Asn Asn Phe Phe Arg Met Phe Asp Arg Asp

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```

      355              360              365
Thr Lys Arg Asp Val Thr Leu Glu Ala Ser Arg Glu Asn Ser Lys Pro
  370              375              380
Arg Ala Ile Leu Lys Pro Arg Lys Val Cys Val Gly Gly Lys Arg Arg
  385              390              395              400
Lys Asp Glu Ile Ser Val Asp Ser Leu Asp Phe Ser Lys Lys Ile Leu
      405              410              415
His Thr Ala Trp His Pro Val Asp Asn Val Ile Ala Val Ala Ala Thr
      420              425              430
Asn Asn Leu Tyr Ile Phe Gln Asp Lys Ile Asn
      435              440

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<210> 5141
 <211> 928
 <212> DNA
 <213> Homo sapiens

<400> 5141
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<210> 5142
 <211> 227
 <212> PRT

<213> Homo sapiens

<400> 5142

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          35           40           45
Asn Gln Glu His Glu Val Glu Leu Glu Leu Arg Glu Asp Asn Glu
          50           55           60
Gln Leu Leu Thr Gln Tyr Glu Arg Glu Lys Ala Leu Arg Arg Gln Ala
65           70           75           80
Glu Glu Lys Phe Ile Glu Phe Glu Asp Ala Leu Glu Gln Glu Lys Lys
          85           90           95
Glu Leu Gln Ile Gln Val Glu His Tyr Glu Phe Gln Thr Arg Gln Leu
          100          105          110
Glu Leu Lys Ala Lys Asn Tyr Ala Asp Gln Ile Ser Arg Leu Glu Glu
          115          120          125
Arg Glu Ser Glu Met Lys Lys Glu Tyr Asn Ala Leu His Gln Arg His
          130          135          140
Thr Glu Met Ile Gln Thr Tyr Val Glu His Ile Glu Arg Ser Lys Met
          145          150          155          160
Gln Gln Val Gly Gly Asn Ser Gln Thr Glu Ser Ser Leu Pro Gly Arg
          165          170          175
Ser Arg Lys Glu Arg Pro Thr Ser Leu Asn Val Phe Pro Leu Ala Asp
          180          185          190
Gly Thr Val Arg Ala Gln Ile Gly Gly Lys Leu Val Pro Ala Gly Asp
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His Trp His Leu Ser Asp Leu Gly Gln Leu Gln Ser Ser Ser Ser Tyr
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<210> 5143

<211> 1666

<212> DNA

<213> Homo sapiens

<400> 5143

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360
gatcagtttg atgaaatcat agtagatata gccacaaaac gtaagcagta tcccagaaag
420

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<210> 5144

<211> 218

<212> PRT

<213> Homo sapiens

<400> 5144

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Phe	Glu	Ser	Ala	Val	Gln	Glu	Asn	Ile	Ser	Ile	Asn	Gly	Gln	Ala	Trp
				20				25					30		
Gln	Glu	Ala	Ser	Asp	Asn	Cys	Phe	Met	Asp	Ser	Asp	Ile	Lys	Val	Leu

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 Glu Asp Gln Phe Asp Glu Ile Ile Val Asp Ile Ala Thr Lys Arg Lys
 50 55 60
 Gln Tyr Pro Arg Lys Ile Leu Glu Cys Val Ile Lys Thr Ile Lys Ala
 65 70 75 80
 Lys Gln Glu Ile Leu Lys Gln Tyr His Pro Val Val His Pro Leu Asp
 85 90 95
 Leu Lys Tyr Asp Pro Asp Pro Ala Pro His Met Glu Asn Leu Lys Cys
 100 105 110
 Arg Gly Glu Thr Val Ala Lys Glu Ile Ser Glu Ala Met Lys Ser Leu
 115 120 125
 Pro Ala Leu Ile Glu Gln Gly Glu Gly Phe Ser Gln Val Leu Arg Met
 130 135 140
 Gln Pro Val Ile His Leu Gln Arg Ile His Gln Glu Val Phe Ser Ser
 145 150 155 160
 Cys His Arg Lys Pro Asp Ala Lys Pro Glu Asn Phe Ile Thr Gln Ile
 165 170 175
 Glu Thr Thr Pro Thr Glu Thr Ala Ser Arg Lys Thr Ser Asp Met Val
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 Leu Lys Arg Lys Gln Thr Lys Asp Cys Pro Gln Arg Lys Trp Tyr Pro
 195 200 205
 Leu Arg Pro Lys Lys Ile Asn Leu Asp Thr
 210 215

<210> 5145

<211> 1885

<212> DNA

<213> Homo sapiens

<400> 5145

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 720

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<210> 5146

<211> 312

<212> PRT

<213> Homo sapiens

<400> 5146

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		20					25					30			
Arg	Leu	Gly	Val	Cys	Thr	Gly	Leu	Ala	Cys	Ala	Tyr	His	Leu	Leu	Cys
	35					40				45					
Thr	Pro	Pro	Thr	Pro	Cys	Ile	Pro	Thr	Pro	Gly	Leu	Val	Ala	Pro	Ala

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 Ala Ala Gly Gly Leu Cys Cys Ser Ala Arg Gly Ser Ala Leu Pro Pro
 85 90 95
 Ser Phe Leu Leu Leu Ile Ala Pro Val Cys Gly Ala Tyr Thr Pro Thr
 100 105 110
 Ser Cys Asn Lys Ile Val Ala Ser Ala Lys Lys Pro Gly Ile Arg Thr
 115 120 125
 Gly Ile Gln Gly Leu Lys Gly Asp Gln Gly Glu Pro Gly Pro Ser Gly
 130 135 140
 Asn Pro Gly Lys Val Gly Tyr Pro Gly Pro Ser Gly Pro Leu Gly Ala
 145 150 155 160
 Arg Gly Ile Pro Gly Ile Lys Gly Thr Lys Gly Ser Pro Gly Asn Ile
 165 170 175
 Lys Asp Gln Pro Arg Pro Ala Phe Ser Ala Ile Arg Arg Asn Pro Pro
 180 185 190
 Met Gly Gly Asn Val Val Ile Phe Asp Thr Val Ile Thr Asn Gln Glu
 195 200 205
 Glu Pro Tyr Gln Asn His Ser Gly Arg Phe Val Cys Thr Val Pro Gly
 210 215 220
 Tyr Tyr Tyr Phe Thr Phe Gln Val Leu Ser Gln Trp Glu Ile Cys Leu
 225 230 235 240
 Ser Ile Val Ser Ser Ser Arg Gly Gln Val Arg Arg Ser Leu Gly Phe
 245 250 255
 Cys Asp Thr Thr Asn Lys Gly Leu Phe Gln Val Val Ser Gly Gly Met
 260 265 270
 Val Leu Gln Leu Gln Gln Gly Asp Gln Val Trp Val Glu Lys Asp Pro
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<210> 5147
 <211> 2943
 <212> DNA
 <213> Homo sapiens

<400> 5147
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<210> 5148

<211> 296

<212> PRT

<213> Homo sapiens

<400> 5148

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			20					25					30		
Ile	Asp	Ile	Asp	Thr	Leu	Cys	Ala	Val	Leu	Glu	Arg	Asp	Thr	Leu	Ser
		35					40					45			
Ile	Arg	Glu	Ser	Arg	Leu	Phe	Gly	Ala	Val	Val	Arg	Trp	Ala	Glu	Ala
		50				55					60				
Glu	Cys	Gln	Arg	Gln	Gln	Leu	Pro	Val	Thr	Phe	Gly	Asn	Lys	Gln	Lys
65				70						75				80	
Val	Leu	Gly	Lys	Ala	Leu	Ser	Leu	Ile	Arg	Phe	Pro	Leu	Met	Thr	Ile
			85					90						95	
Glu	Glu	Phe	Ala	Ala	Gly	Pro	Ala	Gln	Ser	Gly	Ile	Leu	Ser	Asp	Arg
			100					105						110	
Glu	Val	Val	Asn	Leu	Phe	Leu	His	Phe	Thr	Val	Asn	Pro	Lys	Pro	Arg

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Val Glu Tyr Ile Asp Arg Pro Arg Cys Cys Leu Arg Gly Lys Glu Cys
      130              135              140
Cys Ile Asn Arg Phe Gln Gln Val Glu Ser Arg Trp Gly Tyr Ser Gly
145              150              155              160
Thr Ser Asp Arg Ile Arg Phe Thr Val Asn Arg Arg Ile Ser Ile Val
      165              170              175
Gly Phe Gly Leu Tyr Gly Ser Ile His Gly Pro Thr Asp Tyr Gln Val
      180              185              190
Asn Ile Gln Ile Ile Glu Tyr Glu Lys Lys Gln Thr Leu Gly Gln Asn
      195              200              205
Asp Thr Gly Phe Ser Cys Asp Gly Thr Ala Asn Thr Phe Arg Val Met
      210              215              220
Phe Lys Glu Pro Ile Glu Ile Leu Pro Asn Val Cys Tyr Thr Ala Cys
225              230              235              240
Ala Thr Leu Lys Gly Pro Asp Ser His Tyr Gly Thr Lys Gly Leu Lys
      245              250              255
Lys Val Val His Glu Thr Pro Ala Ala Ser Lys Thr Val Phe Phe Phe
      260              265              270
Phe Ser Ser Pro Gly Asn Asn Asn Gly Thr Ser Ile Glu Asp Gly Gln
      275              280              285
Ile Pro Glu Ile Ile Phe Tyr Thr
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<210> 5149

<211> 533

<212> DNA

<213> Homo sapiens

<400> 5149

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<210> 5150

<211> 154

<212> PRT

<213> Homo sapiens

<400> 5150

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 Ile Val Gly Asp Ile Ala Pro Ala Asp Asn Ile Pro Lys Glu Glu Lys
 35 40 45
 His Arg Arg Glu Glu Glu Ala Met Lys Gln Ile Thr Gln Leu Leu Pro
 50 55 60
 Glu Asp Leu Arg Lys Glu Leu Tyr Glu Leu Trp Glu Glu Tyr Glu Thr
 65 70 75 80
 Gln Ser Ser Ala Glu Ala Lys Phe Val Lys Gln Leu Asp Gln Cys Glu
 85 90 95
 Met Ile Leu Gln Ala Ser Glu Tyr Glu Asp Leu Glu His Lys Pro Gly
 100 105 110
 Arg Leu Gln Asp Phe Tyr Asp Ser Thr Ala Gly Lys Phe Asn His Pro
 115 120 125
 Glu Ile Val Gln Leu Val Ser Glu Leu Glu Ala Glu Arg Ser Thr Asn
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 Ile Ala Ala Ala Ser Glu Pro His Ser
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<210> 5151

<211> 2273

<212> DNA

<213> Homo sapiens

<400> 5151

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<210> 5152

<211> 324

<212> PRT

<213> Homo sapiens

<400> 5152

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Lys Leu Ser Arg Ala Tyr Asp Gly Thr Thr Tyr Leu Pro Gly Ile Val
50      55      60
Gly Leu Asn Asn Ile Lys Ala Asn Asp Tyr Ala Asn Ala Val Leu Gln
65      70      75      80
Ala Leu Ser Asn Val Pro Pro Leu Arg Asn Tyr Phe Leu Glu Glu Asp
85      90      95
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Val Gln Arg Phe Gly Glu Leu Met Arg Lys Leu Trp Asn Pro Arg Asn
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Phe Lys Ala His Val Ser Pro His Glu Met Leu Gln Ala Val Val Leu
130     135     140
Cys Ser Lys Lys Thr Phe Gln Ile Thr Lys Gln Gly Asp Gly Val Asp
145     150     155     160
Phe Leu Ser Trp Phe Leu Asn Ala Leu His Ser Ala Leu Gly Gly Thr
165     170     175
Lys Lys Lys Lys Lys Thr Ile Val Thr Asp Val Phe Gln Gly Ser Met
180     185     190
Arg Ile Phe Thr Lys Lys Leu Pro His Pro Asp Leu Pro Ala Glu Glu
195     200     205
Lys Glu Gln Leu Leu His Asn Asp Glu Tyr Gln Glu Thr Met Val Glu
210     215     220
Ser Thr Phe Met Tyr Leu Thr Leu Asp Leu Pro Thr Ala Pro Leu Tyr
225     230     235     240
Lys Asp Glu Lys Glu Gln Leu Ile Ile Pro Gln Val Pro Leu Phe Asn
245     250     255
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275     280     285
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<210> 5153

<211> 640

<212> DNA

<213> Homo sapiens

<400> 5153

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<210> 5154

<211> 162

<212> PRT

<213> Homo sapiens

<400> 5154

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			20					25					30		
Ala	Cys	His	Arg	Trp	Leu	Gln	Glu	Gly	Ser	Thr	Leu	Gly	Gly	Thr	Gly
		35				40					45				
Glu	Leu	Ala	Phe	Gly	Ala	Asp	Thr	Leu	Leu	Thr	Leu	Pro	Phe	Leu	Leu
	50				55					60					
Gln	Gly	Val	Pro	Phe	Pro	Gln	Asn	Glu	Ala	Asn	Ala	Met	Asp	Val	Val
65				70				75						80	
Val	Gln	Phe	Ala	Ile	His	Arg	Leu	Gly	Phe	Gln	Pro	Gln	Asp	Ile	Ile
			85					90					95		
Ile	Tyr	Ala	Trp	Ser	Ile	Gly	Gly	Phe	Thr	Ala	Thr	Trp	Ala	Ala	Met
		100					105						110		
Ser	Tyr	Pro	Asp	Val	Ser	Ala	Met	Ile	Leu	Asp	Ala	Ser	Phe	Asp	Asp
	115					120						125			
Leu	Val	Pro	Leu	Ala	Leu	Lys	Val	Met	Pro	Asp	Ser	Trp	Ser	Glu	Cys
	130				135						140				
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<210> 5155

<211> 1402

<212> DNA

<213> Homo sapiens

<400> 5155

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<210> 5156

<211> 118

<212> PRT

<213> Homo sapiens

<400> 5156

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          20           25           30
Ser Gly Gly Leu Gln Trp Val Gln Leu Val Ala His Gly Ser Ala Gly
          35           40           45
Asp Asp Asn Gly Trp Leu Arg Cys His Arg Pro Pro Trp Gln Gly Leu
          50           55           60
Gly Asp Asn Glu Leu Asp Gly Cys Ser Gly Glu Val Asn Val Ser Gln
65           70           75           80
Asp Phe Val Lys Thr Leu Leu Arg Ile Cys Asn Ala Ile Pro Ser Phe
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<210> 5157

<211> 1310

<212> DNA

<213> Homo sapiens

<400> 5157

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840

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<210> 5158

<211> 82

<212> PRT

<213> Homo sapiens

<400> 5158

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			20					25					30		
Gln	Glu	Leu	Ala	Ile	Arg	Tyr	Val	Leu	Cys	Gly	Gln	Ser	Ala	Ser	Gln
		35					40					45			
Thr	His	Arg	Cys	Ser	Pro	Ala	Trp	Leu	Ser	Trp	Asp	Leu	Asn	Leu	Leu
		50				55					60				
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<210> 5159

<211> 3233

<212> DNA

<213> Homo sapiens

<400> 5159

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<211> 849

<212> PRT

<213> Homo sapiens

<400> 5160

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4341

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Tyr	Gly	Ser	Lys	Val	Phe	Asp	Ser	Leu	Val	His	Ile	Ile	Asn	Leu	Leu		
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Leu	Pro	Thr	Ile	Leu	His	Val	Asp	Asp	Ser	Leu	Gln	Ala	Ile	Lys	Leu		
	690					695					700						
Gln	Cys	Ile	Gly	Lys	Thr	Val	Glu	Ser	Gln	Leu	Tyr	Thr	Asn	Pro	Asp		
705					710					715					720		
Ser	Arg	Tyr	Ile	Leu	Leu	Pro	Val	Val	Leu	His	His	Leu	His	Ile	His		
				725					730					735			
Leu	Gln	Glu	Gln	Lys	Asp	Leu	Ile	Met	Cys	Ala	Arg	Ile	Leu	Ser	Asn		
		740						745					750				
Val	Phe	Cys	Leu	Ile	Lys	Lys	Asn	Ser	Ser	Glu	Lys	Ser	Val	Leu	Glu		
	755						760					765					
Glu	Ile	Asp	Val	Ile	Val	Ala	Ser	Leu	Leu	Asp	Ile	Leu	Leu	Arg	Thr		
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<210> 5161
<211> 1645
<212> DNA
<213> Homo sapiens
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<400> 5161
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gaggccaggg gagtttaaag ctcgatttca cccgcgcagc ctccaatccg ggtgttctga
240
gaatcagcca tgtcatccct gtacccatct ctagaggacc taaaagtggc ccaagccatt
300
caggccagg tcagagcctc acccaagatg ccagccctgc cagtccaggc aacagccatt
360
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420
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480
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540
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720
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780
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900
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960
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1020
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1080
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1140
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1200
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1260
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1380
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 1645

<210> 5162
 <211> 207
 <212> PRT
 <213> Homo sapiens

<400> 5162
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 20 25 30
 Lys Thr Gly Leu Arg Leu Arg Lys Val Asp Gln Gly Leu Phe Val Gln
 35 40 45
 Leu Val Gln Ala Asn Thr Pro Ala Ser Leu Val Gly Leu Arg Phe Gly
 50 55 60
 Asp Gln Leu Leu Gln Ile Asp Gly Arg Asp Cys Ala Gly Trp Ser Ser
 65 70 75 80
 His Lys Ala His Gln Val Val Lys Lys Ala Ser Gly Asp Lys Ile Val
 85 90 95
 Val Val Val Arg Asp Arg Pro Phe Gln Arg Thr Val Thr Met His Lys
 100 105 110
 Asp Ser Met Gly His Val Gly Phe Val Ile Lys Lys Gly Lys Ile Val
 115 120 125
 Ser Leu Val Lys Gly Ser Ser Ala Ala Cys Asn Gly Leu Leu Thr Asn
 130 135 140
 His Tyr Val Cys Glu Val Asp Gly Gln Asn Val Ile Gly Leu Lys Asp
 145 150 155 160
 Lys Lys Ile Met Glu Ile Leu Ala Thr Ala Gly Asn Val Val Thr Leu
 165 170 175
 Thr Ile Ile Pro Ser Val Ile Tyr Glu His Met Val Lys Lys Leu Pro
 180 185 190
 Pro Val Leu Leu His His Thr Met Asp His Ser Ile Pro Asp Ala
 195 200 205

<210> 5163
 <211> 1187
 <212> DNA
 <213> Homo sapiens

<400> 5163
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 180
 aagctcttgg ttctgagaaa caggcccaac actgcacagt gtcattcgca gtcaacccaa
 240
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 420
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 660
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 720
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 900
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 960
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 1020
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 1080
 gcacatattg tgtgatgtgc gtgctcctgt atgtgtgtgc atatgtgtgt atgccttgca
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<210> 5164

<211> 213

<212> PRT

<213> Homo sapiens

<400> 5164

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		20					25					30			
Arg	His	Trp	Ala	Trp	Ser	Gly	Asp	Thr	Phe	Ser	Gly	Gln	Phe	Val	Leu
		35				40					45				
Gly	Glu	Pro	Gln	Gly	Tyr	Gly	Val	Met	Glu	Tyr	Lys	Ala	Gly	Gly	Cys
	50					55					60				
Tyr	Glu	Gly	Glu	Val	Ser	His	Gly	Met	Arg	Glu	Gly	His	Gly	Phe	Leu
65					70				75					80	
Val	Asp	Arg	Asp	Gly	Gln	Val	Tyr	Gln	Gly	Ser	Phe	His	Asp	Asn	Lys
			85					90					95		
Arg	His	Gly	Pro	Gly	Gln	Met	Leu	Phe	Gln	Asn	Gly	Asp	Lys	Tyr	Asp
		100					105					110			
Gly	Asp	Trp	Val	Arg	Asp	Arg	Arg	Gly	His	Gly	Val	Leu	Arg	Cys	
	115					120					125				
Ala	Asp	Gly	Ser	Thr	Tyr	Lys	Gly	Gln	Trp	His	Ser	Asp	Val	Phe	Ser

130	135	140
Gly Leu Gly Ser Met	Ala His Cys Ser Gly Val Thr Tyr Tyr Gly Leu	
145	150	155
Trp Ile Asn Gly His	Pro Ala Glu Gln Ala Thr Arg Ile Val Ile Leu	160
	165	170
Gly Pro Glu Val Met	Glu Val Ala Gln Gly Ser Pro Phe Ser Val Asn	175
	180	185
Val Gln Leu Leu Gln Asp His	Gly Glu Ile Ala Lys Ser Lys His Leu	190
	195	200
Gln Gly Glu Met Thr		205
210		

<210> 5165

<211> 2370

<212> DNA

<213> Homo sapiens

<400> 5165

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 720
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 1020
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 1080

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 1200
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 1380
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 2160
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 2280
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 2340
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<210> 5166

<211> 521

<212> PRT

<213> Homo sapiens

<400> 5166

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 35 40 45
 His Thr Thr Ile Leu Arg Gly Gly Val Arg Arg Cys Leu Gln Gln Gln
 50 55 60
 Cys Glu Gln Thr Val Arg Ile Leu His Ala Lys Val Ala Gln Lys Ser
 65 70 75 80
 Tyr Gly Asn Glu Lys Arg Phe Phe Cys Pro Pro Pro Cys Val Tyr Leu
 85 90 95
 Ser Gly Pro Gly Trp Arg Val Lys Pro Gly Gln Asp Gln Ala His Gln
 100 105 110
 Ala Gly Glu Thr Gly Pro Thr Val Cys Gly Tyr Met Gly Leu Asp Ser
 115 120 125
 Ala Ser Gly Ser Ala Thr Glu Thr Gln Lys Leu Asn Phe Glu Gln Gln
 130 135 140
 Pro Asp Ser Arg Glu Phe Gly Cys Ala Lys Thr Leu Tyr Ile Ser Asp
 145 150 155 160
 Ala Asp Lys Arg Lys His Phe Arg Leu Val Leu Arg Leu Val Leu Arg
 165 170 175
 Gly Gly Arg Glu Leu Gly Thr Phe His Ser Arg Leu Ile Lys Val Ile
 180 185 190
 Ser Lys Pro Ser Gln Lys Lys Gln Ser Leu Lys Asn Thr Asp Leu Cys
 195 200 205
 Ile Ser Ser Gly Ser Lys Val Ser Leu Phe Asn Arg Leu Arg Ser Gln
 210 215 220
 Thr Val Ser Thr Arg Tyr Leu Ser Val Glu Asp Gly Ala Phe Val Ala
 225 230 235 240
 Ser Ala Arg Gln Trp Ala Ala Phe Thr Leu His Leu Ala Asp Gly His
 245 250 255
 Ser Ala Gln Gly Asp Phe Pro Pro Arg Glu Gly Tyr Val Arg Tyr Gly
 260 265 270
 Ser Leu Val Gln Leu Val Cys Thr Val Thr Gly Ile Thr Leu Pro Pro
 275 280 285
 Met Ile Ile Arg Lys Val Ala Lys Gln Cys Ala Leu Leu Asp Val Asp
 290 295 300
 Glu Pro Ile Ser Gln Leu His Lys Cys Ala Phe Gln Phe Pro Gly Ser
 305 310 315 320
 Pro Pro Gly Gly Gly Gly Thr Tyr Leu Cys Leu Ala Thr Glu Lys Val
 325 330 335
 Val Gln Phe Gln Ala Ser Pro Cys Pro Lys Glu Ala Asn Arg Ala Leu
 340 345 350
 Leu Asn Asp Ser Ser Cys Trp Thr Ile Ile Gly Thr Glu Ser Val Glu
 355 360 365
 Phe Ser Phe Ser Thr Ser Leu Ala Cys Thr Leu Glu Pro Val Thr Pro
 370 375 380
 Val Pro Leu Ile Ser Thr Leu Glu Leu Ser Gly Gly Asp Val Ala
 385 390 395 400
 Thr Leu Glu Leu His Gly Glu Asn Phe His Ala Gly Leu Lys Val Trp
 405 410 415
 Phe Gly Asp Val Glu Ala Glu Thr Met Tyr Arg Tyr Gly Val Xaa Ser
 420 425 430
 Pro Arg Ser Leu Val Cys Val Val Pro Asp Val Ala Ala Phe Cys Ser
 435 440 445
 Asp Trp Arg Trp Leu Arg Ala Pro Ile Thr Ile Pro Met Ser Leu Val

450		455		460	
Arg Ala Asp Gly Leu Phe Tyr Pro Ser Ala Phe Ser Phe Thr Tyr Thr					
465		470		475	480
Pro Glu Tyr Ser Val Arg Pro Gly His Pro Gly Val Pro Glu Pro Ala					
	485		490		495
Thr Asp Ala Asp Ala Leu Leu Glu Ser Ile His Gln Glu Phe Thr Arg					
	500		505		510
Thr Asn Phe His Leu Phe Ile Gln Thr					
	515		520		

<210> 5167

<211> 878

<212> DNA

<213> Homo sapiens

<400> 5167

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120
ttggactgtg tgctgcagac acaatatccc aggtctatga gaatgtcaat acagacttca
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720
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780
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<210> 5168

<211> 199

<212> PRT

<213> Homo sapiens

<400> 5168

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Ser Arg Ala Asp Cys Leu Gly Ala Pro Asn Ile Arg Thr Ala Pro Leu
      35           40           45
Gly Arg Ser Glu Lys Arg Thr Ala Ile Cys Phe Ser Thr Gly Ala Gln
      50           55           60
Asp Ser Ser Gln Arg Ala Pro Phe Arg Leu Gln Asn Pro Gly Gln Leu
      65           70           75           80
Leu Gln Thr Ser Val Arg Asn Leu Val Pro Ser Ile Leu His Thr Ser
      85           90           95
Tyr His Ala Ile Phe Asn Pro Arg Thr Trp Val Leu Leu Cys Pro Cys
      100          105          110
Asp Ile Trp Gly Thr Gln Gly Pro Glu Lys Gly Arg Lys Ile Thr His
      115          120          125
Ala Gly Thr Leu Ser Pro Gln Val Lys Leu Arg Thr Gly Asn Gly Lys
      130          135          140
Gln Gly Gly Ser Thr Glu Ala Gly Asn Ser Gly Val Ile Ala Trp Leu
      145          150          155          160
Ser Leu Glu Cys Thr Pro Ser Thr Ser Thr Gln Ser Ser Pro Gln Leu
      165          170          175
Thr Leu Pro Ser Ser Ala Ser Ser Ile Ser Ser Arg Glu Thr Ile Leu
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Ile Ala Ser Pro Phe Pro Thr
      195

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<210> 5169

<211> 609

<212> DNA

<213> Homo sapiens

<400> 5169

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420
gcagagaagg acgagttcga catcccgac ctcaccgaca acagccggcg ccagctgttc
480
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609

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<210> 5170
 <211> 203
 <212> PRT
 <213> Homo sapiens

<400> 5170
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 20 25 30
 Gly Leu Gly Glu Ala Leu Gly Ala Val Glu Leu Ser Leu Ser Glu Phe
 35 40 45
 Leu Leu Leu Phe Thr Thr Ala Gly Ile Tyr Val Asp Gly Ala Gly Arg
 50 55 60
 Lys Ser Arg Gly His Glu Leu Leu Trp Pro Ala Pro Met Gly Trp
 65 70 75 80
 Gly Tyr Ala Ala Pro Tyr Leu Thr Val Phe Ser Glu Asn Ser Ile Asp
 85 90 95
 Val Phe Asp Val Arg Arg Ala Glu Trp Val Gln Thr Val Pro Leu Lys
 100 105 110
 Lys Val Arg Pro Leu Asn Pro Glu Gly Ser Leu Phe Leu Tyr Gly Thr
 115 120 125
 Glu Lys Val Arg Leu Thr Tyr Leu Arg Asn Gln Leu Ala Glu Lys Asp
 130 135 140
 Glu Phe Asp Ile Pro Asp Leu Thr Asp Asn Ser Arg Arg Gln Leu Phe
 145 150 155 160
 Leu Thr Lys Ser Lys Arg Arg Phe Phe Phe Arg Val Ser Glu Glu Gln
 165 170 175
 Gln Lys Gln Gln Arg Arg Glu Met Leu Lys Asp Pro Phe Val Arg Ser
 180 185 190
 Lys Leu Ile Ser Pro Pro Thr Asn Phe Asn His
 195 200

<210> 5171
 <211> 2060
 <212> DNA
 <213> Homo sapiens

<400> 5171
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 cacattcttt cttgtggacc accaaattga aggctttctt gtaattcaca agcagcagct
 180
 ctccagcatc tctccgtagc ctgggtgaag tcccagaagc tgggtgtgcat cattttccaa
 240
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 300
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 360
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 420

acagcgagga tggaaatgga aaggaaccga actaaaatgc atttcccttt gcagggcaga
480
gagctaagct cttaggaata gtgttataga aataagcacc ctaacttcaa ttctgaaaa
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720
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780
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<211> 104
<212> PRT
<213> Homo sapiens

<400> 5172
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Gln Gly Ser Ile Lys Asp His Thr Ala Gly Leu Arg Leu Thr Ala Leu
35 40 45
Ser Pro Glu His Gln Ser Pro Ala Glu Ser Gly Asp Asn Thr Ser Ser
50 55 60
Leu Gln Arg Gly Thr Ser Pro Pro Ala Ala Thr Ser Leu Arg Leu Leu
65 70 75 80
Leu Ser Ser Lys Asp Ser Leu Gly Phe Lys Cys His Phe Pro Cys Phe
85 90 95
Arg Asp Pro Gly Val Leu Ile Ala
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<210> 5173
<211> 557
<212> DNA
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<213> Homo sapiens

<400> 5174

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      20           25           30
Glu Thr Lys Arg Ser Pro Leu Gly Thr Val Leu Ser Pro Gly Ala Glu
      35           40           45
Thr Asp Arg Gly Ser Leu Leu Gly Pro Pro Glu Lys Arg Cys Pro Asp
      50           55           60
Ile Trp Cys Ser Gln Ala Val Ser Pro Ala Gly Leu Cys Phe Pro Asp
65           70           75           80
Arg Gln Thr Ser Pro Ser Leu Ser Leu Ser Gly Lys Met
      85           90

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<210> 5175

<211> 272

<212> DNA

<213> Homo sapiens

<400> 5175

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120
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272

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<210> 5176

<211> 90

<212> PRT

<213> Homo sapiens

<400> 5176

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Met Ala Ala Pro Glu Thr Arg Trp Arg Gly Asn His Pro Thr Leu Pro
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Ser Arg Glu Leu Arg Ser Gln Pro Ala Ser Leu Cys Val Ala His Asn
      20           25           30
Ser Cys Leu His Val Ser Arg Glu Gly Cys Pro Thr Pro Gly Arg Ala
      35           40           45
Ala Thr Pro Thr Pro Ser Pro Gly Thr Ala Ser Gln Arg Ser Leu Pro
      50           55           60
Cys Arg Thr Asp Arg Arg Glu Gly Ser Gly Glu Arg Cys Met Pro Pro
65           70           75           80
Gln Ala Cys Ser Glu Gly Pro Xaa Xaa Xaa
      85           90

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<210> 5177

<211> 637

<212> DNA

<213> Homo sapiens

<400> 5177

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420
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480
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540
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<210> 5178

<211> 92

<212> PRT

<213> Homo sapiens

<400> 5178

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20     25     30
Asn Ser Gln Ile Arg Ser Arg Ser Ser Ser Ser Ser Gly Gly Gly
35     40     45
Leu Leu Pro Tyr Pro Arg Arg Arg Pro Pro His Ser Ala Arg Gly Gly
50     55     60
Gly Ser Gly Gly Gly Gly Gly Ser Ser Ser Ser Ser Ser Ser Ser Gln
65     70     75     80
Gln Gln Leu Arg Asn Phe Ser Arg Ser Arg His Ala
85     90

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<210> 5179

<211> 1527

<212> DNA

<213> Homo sapiens

<400> 5179

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1527

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<211> 444

<212> PRT

<213> Homo sapiens

<400> 5180

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 35 40 45
 His Thr Glu Gly Lys Arg Tyr Phe Thr Trp Asp Lys Asn Arg Phe Pro
 50 55 60
 Asn Pro Lys Arg Met Gln Glu Leu Leu Arg Asn Lys Lys Arg Lys Leu
 65 70 75 80
 Val Val Ile Ser Asp Pro His Ile Lys Ile Glu Pro Asp Tyr Ser Val
 85 90 95
 Tyr Val Lys Ala Lys Asp Gln Gly Phe Phe Val Lys Asn Gln Glu Gly
 100 105 110
 Glu Asp Phe Glu Gly Val Cys Trp Pro Gly Leu Ser Ser Tyr Leu Asp
 115 120 125
 Phe Thr Asn Pro Lys Val Arg Glu Trp Tyr Ser Ser Leu Phe Ala Phe
 130 135 140
 Pro Val Tyr Gln Gly Ser Thr Asp Ile Leu Phe Leu Trp Asn Asp Met
 145 150 155 160
 Asn Glu Pro Ser Val Phe Arg Gly Pro Glu Gln Thr Met Gln Lys Asn
 165 170 175
 Ala Ile His His Gly Asn Trp Glu His Arg Glu Leu His Asn Ile Tyr
 180 185 190
 Gly Phe Tyr His Gln Met Ala Thr Ala Glu Gly Leu Ile Lys Arg Ser
 195 200 205
 Lys Gly Lys Glu Arg Pro Phe Val Leu Thr Arg Ser Phe Phe Ala Gly
 210 215 220
 Ser Gln Lys Tyr Gly Ala Val Trp Thr Gly Asp Asn Thr Ala Glu Trp
 225 230 235 240
 Ser Asn Leu Lys Ile Ser Ile Pro Met Leu Leu Thr Leu Ser Ile Thr
 245 250 255
 Gly Ile Ser Phe Cys Gly Ala Asp Ile Gly Gly Phe Ile Gly Asn Pro
 260 265 270
 Glu Thr Glu Leu Leu Val Arg Trp Tyr Gln Ala Gly Ala Tyr Gln Pro
 275 280 285
 Phe Phe Arg Gly His Ala Thr Met Asn Thr Lys Arg Arg Glu Pro Trp
 290 295 300
 Leu Phe Gly Glu Glu His Thr Arg Leu Ile Arg Glu Ala Ile Arg Glu
 305 310 315 320
 Arg Tyr Gly Leu Leu Pro Tyr Trp Tyr Ser Leu Phe Tyr His Ala His
 325 330 335
 Val Ala Ser Gln Pro Val Met Arg Pro Leu Trp Val Glu Phe Pro Asp
 340 345 350
 Glu Leu Lys Thr Phe Asp Met Glu Asp Glu Tyr Met Leu Gly Ser Ala
 355 360 365
 Leu Leu Val His Pro Val Thr Glu Pro Lys Ala Thr Thr Val Asp Val
 370 375 380
 Phe Leu Pro Gly Ser Asn Glu Val Trp Tyr Asp Tyr Lys Thr Phe Ala
 385 390 395 400
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4358

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<211> 697

<212> PRT

<213> Homo sapiens

<400> 5182

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			20					25					30		
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		35					40					45			
Lys	Ala	Leu	Gln	Pro	Pro	Cys	Asn	Leu	Leu	Met	Gln	Ser	Glu	Glu	Val
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Glu	Asp	Ser	Gly	Gly	Ala	Arg	Arg	Ser	Val	Ile	Gly	Ser	Gly	Pro	Gln
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Leu	Leu	Thr	His	Tyr	Tyr	Asp	Asp	Ala	Arg	Thr	Met	Tyr	Gln	Val	Phe
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Cys	Thr	Asp	Gln	Phe	Ile	Gly	Val	Phe	Ala	Gln	Asn	Arg	Pro	Glu	Trp
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			165					170					175		
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Ala	Asp	Ile	Ser	Thr	Val	Ile	Val	Asp	Lys	Pro	Gln	Lys	Ala	Val	Leu
	195					200					205				
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Ile	Leu	Met	Asp	Pro	Phe	Glu	Glu	Ala	Leu	Lys	Glu	Arg	Gly	Gln	Lys
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Cys	Gly	Val	Val	Ile	Lys	Ser	Met	Gln	Ala	Val	Glu	Asp	Cys	Gly	Gln

4362

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680

685

695

<210> 5183
 <211> 2466
 <212> DNA
 <213> Homo sapiens

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<210> 5184

<211> 395

<212> PRT

<213> Homo sapiens

<400> 5184

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Asp	Asp	Ala	Phe	Ile	Asn	Pro	His	Leu	Ala	Lys	Ile	Phe	Glu	Arg	Val
		35					40				45				
Arg	Gln	Ser	Ala	Asp	Phe	Met	Pro	Leu	Lys	Gln	Met	Met	Lys	Thr	Leu

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 Met Lys Gly Gly Arg Glu Val Ala Met Lys Ile Gln Tyr Pro Gly Val
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 Ala Gln Ser Ile Asn Ser Asp Val Asn Asn Leu Met Ala Val Leu Asn
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 Met Ser Asn Met Leu Pro Glu Gly Leu Phe Pro Glu His Leu Ile Asp
 130 135 140
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 145 150 155 160
 Ala Cys Ala Arg Lys Phe Arg Asp Leu Leu Lys Gly His Pro Phe Phe
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 Tyr Val Pro Glu Ile Val Asp Glu Leu Cys Ser Pro His Val Leu Thr
 180 185 190
 Thr Glu Leu Val Ser Gly Phe Pro Leu Asp Gln Ala Glu Gly Leu Ser
 195 200 205
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 Arg Glu Leu Phe Glu Phe His Phe Met Gln Thr Asp Pro Asn Trp Ser
 225 230 235 240
 Asn Phe Phe Tyr Asp Pro Gln Gln His Lys Val Ala Leu Leu Asp Phe
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 Gly Ala Thr Arg Glu Tyr Asp Arg Ser Phe Thr Asp Leu Tyr Ile Gln
 260 265 270
 Ile Ile Arg Ala Ala Ala Asp Arg Asp Arg Glu Thr Val Arg Ala Lys
 275 280 285
 Ser Ile Glu Met Lys Phe Leu Thr Gly Tyr Glu Val Lys Val Met Glu
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 Asp Ala His Leu Asp Ala Ile Leu Ile Leu Gly Glu Ala Phe Ala Ser
 305 310 315 320
 Asp Glu Pro Phe Asp Phe Gly Thr Gln Ser Thr Thr Glu Lys Ile His
 325 330 335
 Asn Leu Ile Pro Val Met Leu Arg His Arg Leu Val Pro Pro Pro Glu
 340 345 350
 Glu Thr Tyr Ser Leu His Arg Lys Met Gly Gly Ser Phe Leu Ile Cys
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 Ser Lys Leu Lys Ala Arg Phe Pro Cys Lys Ala Met Phe Glu Glu Ala
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<210> 5185

<211> 1657

<212> DNA

<213> Homo sapiens

<400> 5185

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120

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<210> 5186

<211> 243
 <212> PRT
 <213> Homo sapiens

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 Arg Phe Lys Arg Phe Ala Cys Leu Cys Leu Ser Tyr Val Pro Phe Arg
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 Lys Ile Leu Leu Gln Glu Lys Ile Trp Phe Gln Asp Val Ser Trp Thr
 85 90 95
 Gly Gly His Val Pro Arg Val Pro Arg Thr Gly Trp Val Tyr Arg Asn
 100 105 110
 Val Gln Arg Pro Glu Ser Val Ser Asp His Met Tyr Arg Met Ala Val
 115 120 125
 Met Ala Met Val Ile Lys Asp Asp Arg Leu Asn Lys Asp Xaa Glu Ala
 130 135 140
 Met Lys Gln Ile Thr Gln Leu Leu Pro Glu Asp Leu Arg Lys Glu Leu
 145 150 155 160
 Tyr Glu Leu Trp Glu Glu Tyr Glu Thr Gln Ser Ser Ala Glu Ala Lys
 165 170 175
 Phe Val Lys Gln Leu Asp Gln Cys Glu Met Ile Leu Gln Ala Ser Glu
 180 185 190
 Tyr Glu Asp Leu Glu His Lys Pro Gly Arg Leu Gln Asp Phe Tyr Asp
 195 200 205
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<210> 5187
 <211> 1712
 <212> DNA
 <213> Homo sapiens

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<210> 5188

<211> 489

<212> PRT

<213> Homo sapiens

<400> 5188

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      35           40           45
Thr Asn Thr Arg Ser Asp Leu Gly Pro Cys Glu Lys Ile His Asp Glu
      50           55           60
Asn Leu Arg Lys Gln Tyr Glu Lys Ser Ser Arg Phe Met Lys Val Gly
      65           70           75           80
Tyr Glu Arg Asp Phe Leu Arg Tyr Leu Gln Ser Leu Leu Ala Glu Val
      85           90           95
Glu Arg Arg Ile Arg Arg Gly His Ala Arg Leu Ala Leu Ser Gln Asn
      100          105          110
Gln Gln Ser Ser Gly Ala Ala Gly Pro Thr Gly Lys Asn Glu Glu Lys
      115          120          125
Ile Gln Val Leu Thr Asp Lys Ile Asp Val Leu Leu Gln Gln Ile Glu
      130          135          140
Glu Leu Gly Ser Glu Gly Lys Val Glu Glu Ala Gln Gly Met Met Lys
      145          150          155          160
Leu Val Glu Gln Leu Lys Glu Glu Arg Glu Leu Leu Arg Ser Thr Thr
      165          170          175
Ser Thr Ile Glu Ser Phe Ala Ala Gln Glu Lys Gln Met Glu Val Cys
      180          185          190
Glu Val Cys Gly Ala Phe Leu Ile Val Gly Asp Ala Gln Ser Arg Val
      195          200          205
Asp Asp His Leu Met Gly Lys Gln His Met Gly Tyr Ala Lys Ile Lys
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Ala Thr Val Glu Glu Leu Lys Glu Lys Leu Arg Lys Arg Thr Glu Glu
      225          230          235          240
Pro Asp Arg Asp Glu Arg Leu Lys Lys Glu Lys Gln Glu Arg Glu Glu
      245          250          255
Arg Glu Lys Glu Arg Glu Arg Glu Arg Glu Glu Arg Glu Arg Lys Arg
      260          265          270
Arg Arg Glu Glu Glu Glu Arg Glu Lys Glu Arg Ala Arg Asp Arg Glu
      275          280          285
Arg Arg Lys Arg Ser Arg Ser Arg Ser Arg His Ser Ser Arg Thr Ser
      290          295          300
Asp Arg Arg Cys Ser Arg Ser Arg Asp His Lys Arg Ser Arg Ser Arg
      305          310          315          320
Glu Arg Arg Arg Ser Arg Ser Arg Asp Arg Arg Arg Ser Arg Ser His
      325          330          335
Asp Arg Ser Glu Arg Lys His Arg Ser Arg Ser Arg Asp Arg Arg Arg
      340          345          350
Ser Lys Ser Arg Asp Arg Lys Ser Tyr Lys His Arg Ser Lys Ser Arg
      355          360          365
Asp Arg Glu Gln Asp Arg Lys Ser Lys Glu Lys Glu Lys Arg Gly Ser
      370          375          380
Asp Asp Lys Lys Ser Ser Val Lys Ser Gly Ser Arg Glu Lys Gln Ser
      385          390          395          400
Glu Asp Thr Asn Thr Glu Ser Lys Glu Ser Asp Thr Lys Asn Glu Val
      405          410          415
Asn Gly Thr Ser Glu Asp Ile Lys Ser Glu Val Gln Arg Lys Tyr Ala

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420 425 430
 Gln Met Lys Met Glu Leu Ser Arg Val Arg Arg His Thr Lys Ala Ser
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<210> 5189

<211> 323

<212> DNA

<213> Homo sapiens

<400> 5189

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<210> 5190

<211> 100

<212> PRT

<213> Homo sapiens

<400> 5190

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 Trp Asn Pro Lys Ile Thr Lys Cys Leu Ala Ile Gln Val Met Ser Ser
 35 40 45
 Ser Ile Gln Thr His Glu Val Asn His Ser Leu Ile Pro Val Tyr Leu
 50 55 60
 Tyr Phe Ile Phe Ala Phe Phe Leu Leu His Val Leu Phe Leu Gln Lys
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 Ser Gln Val Lys Cys Phe Trp Gly Thr Leu Gly Gly Gly Asp Lys His
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 Pro Cys Ala Ala
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<210> 5191

<211> 1632

<212> DNA

<213> Homo sapiens

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<212> PRT
<213> Homo sapiens
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<210> 5193
 <211> 554
 <212> DNA
 <213> Homo sapiens

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<210> 5194
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 <212> PRT
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<400> 5194
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 35 40 45
 Gly Gly Ala Cys Pro Ala Ser Ser Leu Val Ser Pro Val Pro Arg
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 Ala Asn Thr Phe Ser Ala Arg Ser Gly Thr Arg Leu Glu Gly Pro Ala
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<210> 5195
 <211> 964

<212> DNA

<213> Homo sapiens

<400> 5195

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<210> 5196

<211> 267

<212> PRT

<213> Homo sapiens

<400> 5196

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35      40      45
Ser Ala Leu Asp Tyr Thr Lys Arg Ser Leu Gly Ile Phe Ile Asp Leu
50      55      60
Gln Lys Lys Glu Lys Glu Ala His Ala Trp Leu Gln Ala Gly Lys Ile

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				165					170					175	
His	Met	Ala	Leu	Ala	Leu	Ser	Ile	Thr	Leu	Gly	Asp	Arg	Leu	Asn	Glu
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Arg	Val	Ala	Tyr	His	Arg	Leu	Ala	Ala	Leu	Gln	His	Arg	Leu	Gly	His
		195				200					205				
Gly	Glu	Leu	Ala	Glu	His	Phe	Tyr	Leu	Lys	Ala	Leu	Ser	Leu	Cys	Asn
		210				215					220				
Ser	Pro	Leu	Glu	Phe	Asp	Glu	Glu	Thr	Leu	Tyr	Tyr	Val	Lys	Val	Tyr
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Leu	Val	Leu	Gly	Asp	Ile	Ile	Phe	Tyr	Asp	Leu	Lys	Asp	Pro	Phe	Asp
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<210> 5197

<211> 1045

<212> DNA

<213> Homo sapiens

<400> 5197

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<210> 5198

<211> 283

<212> PRT

<213> Homo sapiens

<400> 5198

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			20					25					30		
Glu	Glu	Glu	Glu	Glu	Val	Val	Lys	Asp	Gly	Arg	Pro	Lys	Trp	Asn	Ser
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Trp	Asp	Pro	Arg	Arg	Gln	Arg	Gln	Leu	Ser	Met	Ser	Ser	Ala	Asp	Ser
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Val	Gly	Ala	Ser	Arg	Val	Val	Arg	Lys	Ala	Pro	Asp	Pro	Gln	Pro	Pro
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Pro	Arg	Lys	Leu	His	Gly	Trp	Ala	Pro	Gly	Pro	Asp	Tyr	Gln	Lys	Ser
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Ser	Met	Gly	Ser	Met	Phe	Arg	Gln	Gln	Ser	Ile	Glu	Asp	Lys	Glu	Asp
		115				120					125				
Lys	Pro	Pro	Pro	Arg	Gln	Lys	Phe	Ile	Gln	Ser	Glu	Met	Ser	Glu	Ala
		130			135						140				
Val	Glu	Arg	Ala	Arg	Lys	Arg	Arg	Glu	Glu	Glu	Glu	Arg	Arg	Ala	Arg
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Glu	Glu	Arg	Leu	Ala	Ala	Cys	Ala	Ala	Lys	Leu	Lys	Gln	Leu	Asp	Gln
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Lys	Cys	Lys	Gln	Ala	Arg	Lys	Ala	Gly	Glu	Ala	Arg	Lys	Gln	Ala	Glu
			180					185					190		
Lys	Glu	Val	Pro	Trp	Ser	Pro	Ser	Ala	Glu	Lys	Ala	Ser	Pro	Gln	Glu
		195				200						205			
Asn	Gly	Pro	Ala	Val	His	Lys	Gly	Ser	Pro	Glu	Phe	Pro	Ala	Gln	Glu
		210				215					220				
Thr	Pro	Thr	Thr	Phe	Pro	Glu	Glu	Ala	Pro	Thr	Val	Ser	Pro	Ala	Val
225					230					235				240	
Ala	Gln	Ser	Asn	Ser	Ser	Glu	Glu	Glu	Ala	Arg	Glu	Ala	Gly	Ser	Pro
			245					250					255		
Ala	Gln	Glu	Phe	Lys	Tyr	Gln	Lys	Ser	Leu	Pro	Pro	Arg	Phe	Gln	Arg

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 <211> 1332
 <212> DNA
 <213> Homo sapiens

<400> 5199
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1332

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<211> 358

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<213> Homo sapiens

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Leu Thr Ala Trp Gly Glu Asp Gly Thr Pro Leu Gly His Thr Arg Phe
 35           40           45
Gln Gly Ala Asp Asp Val Thr Ser Val Leu Phe Ser Pro Ser Cys Pro
 50           55           60
Thr Lys Leu Tyr Ala Ser His Gly Glu Thr Ile Ser Val Leu Asp Val
 65           70           75           80
Arg Ser Leu Lys Asp Ser Leu Asp His Phe His Val Asn Glu Glu Glu
 85           90           95
Ile Asn Cys Leu Ser Leu Asn Gln Thr Glu Asn Leu Leu Ala Ser Ala
 100          105          110
Asp Asp Ser Gly Ala Ile Lys Ile Leu Asp Leu Glu Asn Lys Lys Val
 115          120          125
Ile Arg Ser Leu Lys Arg His Ser Asn Ile Cys Ser Ser Val Ala Phe
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Arg Pro Gln Arg Pro Gln Ser Leu Val Ser Cys Gly Leu Asp Met Gln
 145          150          155          160
Val Met Leu Trp Ser Leu Gln Lys Ala Arg Pro Leu Trp Ile Thr Asn
 165          170          175
Leu Gln Glu Asp Glu Thr Glu Glu Met Glu Gly Pro Gln Ser Pro Gly
 180          185          190
Gln Leu Leu Asn Pro Ala Leu Ala His Ser Ile Ser Val Ala Ser Cys
 195          200          205
Gly Asn Ile Phe Ser Cys Gly Ala Glu Asp Gly Lys Val Arg Ile Phe
 210          215          220
Arg Val Met Gly Val Lys Cys Glu Gln Glu Leu Gly Phe Lys Gly His
 225          230          235          240
Thr Ser Gly Val Ser Gln Val Cys Phe Leu Pro Glu Ser Tyr Leu Leu
 245          250          255
Leu Thr Gly Gly Asn Asp Gly Lys Ile Thr Leu Trp Asp Ala Asn Ser
 260          265          270
Glu Val Glu Lys Lys Gln Lys Ser Pro Thr Lys Arg Thr His Arg Lys
 275          280          285
Lys Pro Lys Arg Gly Thr Cys Thr Lys Gln Gly Gly Asn Thr Asn Ala
 290          295          300
Ser Val Thr Asp Glu Glu Glu His Gly Asn Ile Leu Pro Lys Leu Asn
 305          310          315          320
Ile Glu His Gly Glu Lys Val Asn Trp Leu Leu Gly Thr Lys Ile Lys
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355

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<211> 6104

<212> DNA

<213> Homo sapiens

<400> 5201

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<211> 108

<212> PRT

<213> Homo sapiens

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 35           40           45
Pro His Ser Gly Leu Pro Ala Gln Gly Arg Arg Pro Glu Pro Val Trp
 50           55           60
Pro Cys Ser Pro Gly Gln Ser Trp Ala Cys Arg Val Phe Leu Pro Gly
 65           70           75           80
Arg Cys Arg Cys Trp Pro Ser Ala Gly Gly Arg Arg Trp Glu Ser Trp
 85           90           95
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<210> 5203

<211> 1863

<212> DNA

<213> Homo sapiens

<400> 5203

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<210> 5204

<211> 249

<212> PRT

<213> Homo sapiens

<400> 5204

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<210> 5206

<211> 248

<212> PRT

<213> Homo sapiens

<400> 5206

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		20						25					30		
Asp	Arg	Arg	Lys	Leu	Arg	Ala	Asp	Val	Thr	Thr	Ala	Phe	Pro	Thr	Leu
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 Thr Val Tyr Thr Leu Trp Ser Tyr Pro Asp Leu Leu Pro Thr Phe Thr
 100 105 110
 Thr Trp Pro Leu Val Leu Glu Lys Leu Val Gly Gly Ala Asp Leu Met
 115 120 125
 Leu Pro Gly Leu Val Met Pro Pro Ala Gly Leu Pro Gln Val Gln Lys
 130 135 140
 Gly Asp Leu Cys Ala Ile Ser Leu Val Gly Asn Arg Ala Pro Val Ala
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 Ile Gly Val Ala Ala Met Ser Thr Ala Glu Met Leu Thr Ser Gly Leu
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 Lys Gly Arg Gly Phe Ser Val Leu His Thr Tyr Gln Asp His Leu Trp
 180 185 190
 Arg Ser Gly Asn Lys Ser Ser Pro Pro Ser Ile Ala Pro Leu Ala Leu
 195 200 205
 Asp Ser Ala Asp Leu Ser Glu Glu Lys Gly Ser Val Gln Met Asp Ser
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<210> 5207

<211> 594

<212> DNA

<213> Homo sapiens

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<211> 136
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 Asn Gly His Val His Asp Leu Gln Ile Leu Asp Phe Pro Pro Ile Ser
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 Ala Phe Pro Val Asn Thr Leu Gln Glu Trp Ala Asp Thr Cys Cys Arg
 65 70 75 80
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 85 90 95
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<211> 85

<212> PRT

<213> Homo sapiens

<400> 5210

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Val	Glu	Glu	Leu	Arg	Trp	Arg	Gln	Arg	Arg	Ala	Ala	Lys	Gly	Ala	Arg
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<211> 602

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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35 40 45
Ser Lys Lys Ile Glu Glu Leu Met Lys Ile Gly Ser Asp Val Glu Leu
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Leu Leu Arg Thr Ser Val Ile Gln Gly Ile His Thr Asp His Asn Thr
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<210> 5213
<211> 4387
<212> DNA
<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 5214

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Lys	Phe	Ile	His	Gly	Gln	His	Ser	Pro	Lys	Arg	Ile	Ser	Phe	Leu	Tyr

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Val Asp Tyr Lys Gly Val Arg Asp Leu Leu Lys Val Ile Leu Glu Lys
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Trp Lys Leu Asp Pro Ala Thr Leu Arg Phe Pro Leu Lys Gly Leu Leu
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His Ser Leu Arg Leu His His Glu Phe Leu Gln Gln Ser Leu Arg His
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Glu Thr Ile Tyr Gly Asn Gly Ile Met Arg Leu Pro Leu Pro Gly Thr

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Val	Cys	Tyr	Phe	Ile	Ile	Gln	Leu	Leu	Leu	Lys	Pro	Asn	Asp	Phe	
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<211> 541

<212> PRT

<213> Homo sapiens

<400> 5218

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Ser	Pro	Gly	Ala	Ala	Pro	Gly	Thr	Leu	Cys	Cys	Phe	Leu	Trp	Pro	Arg
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Val	Gly	Thr	Gly	Leu	Cys	Pro	Gly	Leu	Ser	Leu	Pro	Gln	Pro	His	Leu
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Pro	His	Cys	Gln	Pro	Gln	Ser	Leu	Pro	Ala	Xaa	Ala	Arg	Val	Leu	Ser
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 180 185 190
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 Lys Ile Leu Ile Val Asp Trp Asp Val His His Gly Asn Ala Thr Gln
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 Gln Thr Phe Tyr Gln Asp Pro Ser Val Leu Tyr Ile Ser Leu His Arg
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 Val Ser Ala Gly Phe Asp Ala Ala Glu Gly His Pro Ala Pro Leu Gly
 385 390 395 400
 Gly Tyr His Val Ser Ala Lys Cys Phe Gly Tyr Met Thr Gln Gln Leu
 405 410 415
 Met Asn Leu Ala Gly Gly Ala Val Val Leu Ala Leu Glu Gly Gly His
 420 425 430
 Asp Leu Thr Ala Ile Cys Asp Ala Ser Glu Ala Cys Val Ala Ala Leu
 435 440 445
 Leu Gly Asn Arg Val Asp Pro Leu Ser Glu Glu Gly Trp Lys Gln Lys
 450 455 460
 Pro Asn Leu Asn Ala Ile Arg Ser Leu Glu Ala Val Ile Arg Val His
 465 470 475 480
 Ser Lys Tyr Trp Gly Cys Met Gln Arg Leu Ala Ser Cys Pro Asp Ser
 485 490 495
 Trp Val Pro Arg Val Pro Gly Ala Asp Lys Glu Glu Val Glu Ala Val
 500 505 510
 Thr Ala Leu Ala Ser Leu Ser Val Gly Ile Leu Ala Glu Asp Arg Pro
 515 520 525
 Ser Glu Gln Leu Val Glu Glu Glu Pro Met Asn Leu
 530 535 540

<210> 5219
<211> 1212
<212> DNA
<213> Homo sapiens

<400> 5219
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120
aacgtctccc tgctcacccc acccccgcgc agacgcagtg ctgagcacac agctaccgga
180
caaagagtga cgcccgagc tggagttagt gcggctacgg agccgatctt ggcgccact
240
gggagtcccg cggcgggtgcc accggagaaa ctggaaggag ccggttcgag ctacagccct
300
gagcgttaact gtgtgggtc ctcgctgcca gaggcctcac cgcctgcccc tgagccttcc
360
agtcccaacg ccgcgggtccc tgaagccatc cctacgcccc gagctgcggc ctccgcggcc
420
ctggagctgc ctctcgggcc cgcaccctg agcgtagcgc ctcaggccga agctgaagcg
480
cgctccacac caggccccgc cggctctaga ctcggtcccg agacgttccg ccagcgtttc
540
cggcagttcc gctaccagga tgcggcgggt ccccgaggag ctttcggca gctgcgggag
600
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660
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720
cgcacggatg tgcgcatcac tggctgagcg gtggagctgc gggcgccag ggccggcg
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840
ttaatgaaa atgagttttg gcagcgctg tggctggtg tgtctcttc attcgttctt
900
attgggttta ttttaccaag cctgtttcct accgccttc tggctggtg cgaaacgaag
960
ttgggagtcc gtaacaataa ggccttcgtt ggctatagt ggatctttag atgttgactg
1020
aacctagggt atccctctac cacacatggg aagtttttca cctgggctcc caaggacca
1080
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1140
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1200
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1212

<210> 5220
<211> 179
<212> PRT
<213> Homo sapiens

<400> 5220

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Met Ala Ala Thr Glu Pro Ile Leu Ala Ala Thr Gly Ser Pro Ala Ala
 1           5           10           15
Val Pro Pro Glu Lys Leu Glu Gly Ala Gly Ser Ser Ser Ala Pro Glu
          20           25           30
Arg Asn Cys Val Gly Ser Ser Leu Pro Glu Ala Ser Pro Pro Ala Pro
          35           40           45
Glu Pro Ser Ser Pro Asn Ala Ala Val Pro Glu Ala Ile Pro Thr Pro
          50           55           60
Arg Ala Ala Ala Ser Ala Ala Leu Glu Leu Pro Leu Gly Pro Ala Pro
65           70           75           80
Val Ser Val Ala Pro Gln Ala Glu Ala Glu Ala Arg Ser Thr Pro Gly
          85           90           95
Pro Ala Gly Ser Arg Leu Gly Pro Glu Thr Phe Arg Gln Arg Phe Arg
          100          105          110
Gln Phe Arg Tyr Gln Asp Ala Ala Gly Pro Arg Glu Ala Phe Arg Gln
          115          120          125
Leu Arg Glu Leu Ser Arg Gln Trp Leu Arg Pro Asp Ile Arg Thr Lys
          130          135          140
Glu Gln Ile Val Glu Met Leu Val Gln Glu Gln Leu Leu Ala Ile Leu
145          150          155          160
Pro Glu Ala Ala Arg Ala Arg Arg Ile Arg Arg Arg Thr Asp Val Arg
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Ile Thr Gly

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<210> 5221

<211> 497

<212> DNA

<213> Homo sapiens

<400> 5221

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120
gacacctccc tgaccagaga ccctctgggtt atagaacttg gccaaaagca ggtgattcca
180
ggtctggagc agagtcttct cgacatgtgt gtgggagaga agcgaagggc aatcattcct
240
tctcacttgg cctatggaaa acggggattt ccaccatctg tcccagggaac taaagacaac
300
ctgatgaggc cacctggcat gacctccagc agccagtaac ttgttaggga agagacctgc
360
ttgggccaca tgggtctgct gcctgtgcca ccacctttcc cagaacactg gacttctttc
420
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tcagccacca tctgtcc
497

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<210> 5222

<211> 112

<212> PRT

<213> Homo sapiens

<400> 5222

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Xaa Arg Thr Leu Gln Val Glu Thr Leu Val Glu Pro Pro Glu Pro Cys
 1           5           10           15
Ala Glu Pro Ala Ala Phe Gly Asp Thr Leu His Ile His Tyr Thr Gly
      20           25           30
Ser Leu Val Asp Gly Arg Ile Ile Asp Thr Ser Leu Thr Arg Asp Pro
      35           40           45
Leu Val Ile Glu Leu Gly Gln Lys Gln Val Ile Pro Gly Leu Glu Gln
      50           55           60
Ser Leu Leu Asp Met Cys Val Gly Glu Lys Arg Arg Ala Ile Ile Pro
65           70           75           80
Ser His Leu Ala Tyr Gly Lys Arg Gly Phe Pro Pro Ser Val Pro Gly
      85           90           95
Thr Lys Asp Asn Leu Met Arg Pro Pro Gly Met Thr Ser Ser Ser Gln
      100           105           110

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<210> 5223

<211> 637

<212> DNA

<213> Homo sapiens

<400> 5223

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120
tcagagaaga caggacgggg acagttgagg gaaggctgga gagatagtca tcagcctatc
180
atgtgctcct acaagctggt gactgtgaag tttgaggtct gggggcttca gaccagagtg
240
gaacaatttg tacacaaggt ggtccgagac attctgctga ttggacatag acaggctttt
300
gcatgggttg atgagtggta tgatatgaca atggatgatg ttcgggaata cgagaaaaac
360
atgcatgaac aaaccaacat aaaagtttgc aatcagcatt cctcccctgt ggatgacata
420
gagagtcagt cccaaacaag tacatgacaa tggatgaagt ccgagaattt gaacgagcca
480
ctcaggaagc caccaacaag aaaatcggca ttttcccacc tgcaatttct atctccagca
540
tccccctgct gccttcttcc gtccgcagtg cgccttctag tgctccatcc acccctctct
600
ccacagacgc acccgaattt ctgtccgttc ccaaaga
637

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<210> 5224

<211> 148

<212> PRT

<213> Homo sapiens

<400> 5224

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Xaa Thr Ile Phe Asp Asn Glu Ala Lys Asp Val Glu Arg Glu Val Cys

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      1           5           10           15
Phe Ile Asp Ile Ala Cys Asp Glu Ile Pro Glu Arg Tyr Tyr Lys Glu
      20           25           30
Ser Glu Asp Pro Lys His Phe Lys Ser Glu Lys Thr Gly Arg Gly Gln
      35           40           45
Leu Arg Glu Gly Trp Arg Asp Ser His Gln Pro Ile Met Cys Ser Tyr
      50           55           60
Lys Leu Val Thr Val Lys Phe Glu Val Trp Gly Leu Gln Thr Arg Val
      65           70           75           80
Glu Gln Phe Val His Lys Val Val Arg Asp Ile Leu Leu Ile Gly His
      85           90           95
Arg Gln Ala Phe Ala Trp Val Asp Glu Trp Tyr Asp Met Thr Met Asp
      100          105          110
Asp Val Arg Glu Tyr Glu Lys Asn Met His Glu Gln Thr Asn Ile Lys
      115          120          125
Val Cys Asn Gln His Ser Ser Pro Val Asp Asp Ile Glu Ser His Ala
      130          135          140
Gln Thr Ser Thr
145

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<210> 5225

<211> 394

<212> DNA

<213> Homo sapiens

<400> 5225

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acgcgtgaag gggctggggt gggcaatcag ggaggacttc ctggaggcgg cagctgaggc
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120
caggcctggt cagacggaca tgccaaggg aacagatagt accaggacag gggaccctgg
180
tctgaagggg cgatagcctg gccccagtg gaaacagccc ctccaaccc tggcggcaga
240
cagggagggt cggcaggtat gtgagatgca aacctggggg actgcccac cccagtgga
300
tgtgaggaca cggtgggttc aggaagtgga gtgacaaatg ggctgtgctg gacttgcttt
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ccccacatga aggttaggaa ccaagagaac ggcc
394

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<210> 5226

<211> 113

<212> PRT

<213> Homo sapiens

<400> 5226

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Met Trp Gly Lys Gln Val Gln His Ser Pro Phe Val Thr Pro Leu Pro
      1           5           10           15
Glu Pro Thr Val Ser Ser His Pro Leu Gly Asp Gly Gln Ser Pro Arg
      20           25           30
Phe Ala Ser His Ile Pro Ala Asp Pro Pro Cys Leu Pro Pro Gly Leu
      35           40           45
Gly Gly Ala Val Ser Thr Gly Gly Gln Ala Ile Ala Pro Ser Asp Gln

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50					55					60				
Gly	Pro	Leu	Ser	Trp	Tyr	Leu	Phe	Pro	Trp	Ala	Cys	Pro	Ser	Asp
65					70				75				80	
Gln	Ala	Cys	Gln	Asp	Ser	Ala	Tyr	Val	Ser	Pro	Ser	Pro	Ser	Ala
			85					90				95		
Leu	Gly	Pro	Ser	Leu	Pro	Gln	Pro	Gln	Leu	Pro	Pro	Pro	Gly	Ser
			100					105					110	
Pro														

<210> 5227

<211> 2366

<212> DNA

<213> Homo sapiens

<400> 5227

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 120
 ggatgacggt catgccggca ggcaccgtgt agaaggccag tgtggtaacc ttacctgtct
 180
 acctgaactt caccctgca gacctcatct tcaccgtgga cttcgaaatt gctacaaagg
 240
 aggatcctcg cagcttctac gagcgggggtg tcgcagtctt gtgcacagag taaacttttc
 300
 tagctgcccc tttctgtaat agtgaaagt ggtatttaac atttattcat ttttaaaata
 360
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 420
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 480
 cttacggagc tgccctcgtc tactggagca gaagaaatag acctaatttt cctcaaggga
 540
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 600
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 660
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 720
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 780
 ccatcaagcc cagaaatgaa taattcttct atcaataatc agttattacc agtagatgcc
 840
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 900
 gaaaataatg atctggtaat tgcccgaatc ctccatgggg gaatgataga tcgacaaggt
 960
 ctacttcagt tgggagatat aattaaagaa gtcaatggcc atgagggttg aaataatcca
 1020
 aaggaattac aagaattact gaaaaatatt agtggaagtg tcaccctaaa aatcttacca
 1080
 agttatagag ataccattac tcctcaacag gtatttgtga agtgtcattt tgattataat
 1140

ccatacaatg acaacctaata accttgcaaa gaagcaggat tgaagttttc caaaggagag
 1200
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 1260
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 1320
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 1380
 aagatgatgt atctcacaac cagaaatgca gaatttgatc gtcatgaaat ccagatatat
 1440
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 1500
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 1560
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 1620
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 1680
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 1740
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 1800
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 1860
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 1920
 aaaacagtgg atgaaagtgc acggattcag agagcataca accactatct tgatttgatc
 1980
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 aatgaaaatt aaactcttaa aaagtgactg caacaaataa accttctact gagaaaatac
 2160
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 2366

<210> 5228

<211> 550

<212> PRT

<213> Homo sapiens

<400> 5228

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			20					25					30		
Ile	Phe	Leu	Lys	Gly	Ile	Met	Glu	Asn	Pro	Ile	Val	Lys	Ser	Leu	Ala

	35					40					45				
Lys	Ala	Arg	Glu	Arg	Leu	Glu	Asp	Ser	Lys	Leu	Glu	Ala	Val	Ser	Asp
	50					55					60				
Asn	Asn	Leu	Glu	Leu	Val	Asn	Glu	Ile	Leu	Glu	Asp	Ile	Thr	Pro	Leu
65					70					75					80
Ile	Asn	Val	Asp	Glu	Asn	Val	Ala	Glu	Leu	Val	Gly	Ile	Leu	Lys	Glu
				85					90					95	
Pro	His	Phe	Gln	Ser	Leu	Leu	Glu	Ala	His	Asp	Ile	Val	Ala	Ser	Lys
			100					105					110		
Cys	Tyr	Asp	Ser	Pro	Pro	Ser	Ser	Pro	Glu	Met	Asn	Asn	Ser	Ser	Ile
		115					120					125			
Asn	Asn	Gln	Leu	Leu	Pro	Val	Asp	Ala	Ile	Arg	Ile	Leu	Gly	Ile	His
	130					135					140				
Lys	Arg	Ala	Gly	Glu	Pro	Leu	Gly	Val	Thr	Phe	Arg	Val	Glu	Asn	Asn
145					150					155					160
Asp	Leu	Val	Ile	Ala	Arg	Ile	Leu	His	Gly	Gly	Met	Ile	Asp	Arg	Gln
				165					170					175	
Gly	Leu	Leu	His	Val	Gly	Asp	Ile	Ile	Lys	Glu	Val	Asn	Gly	His	Glu
			180				185						190		
Val	Gly	Asn	Asn	Pro	Lys	Glu	Leu	Gln	Glu	Leu	Leu	Lys	Asn	Ile	Ser
		195					200					205			
Gly	Ser	Val	Thr	Leu	Lys	Ile	Leu	Pro	Ser	Tyr	Arg	Asp	Thr	Ile	Thr
	210					215					220				
Pro	Gln	Gln	Val	Phe	Val	Lys	Cys	His	Phe	Asp	Tyr	Asn	Pro	Tyr	Asn
225					230					235					240
Asp	Asn	Leu	Ile	Pro	Cys	Lys	Glu	Ala	Gly	Leu	Lys	Phe	Ser	Lys	Gly
				245					250					255	
Glu	Ile	Leu	Gln	Ile	Val	Asn	Arg	Glu	Asp	Pro	Asn	Trp	Trp	Gln	Ala
			260					265					270		
Ser	His	Val	Lys	Glu	Gly	Gly	Ser	Ala	Gly	Leu	Ile	Pro	Ser	Gln	Phe
		275					280					285			
Leu	Glu	Glu	Lys	Arg	Lys	Ala	Phe	Val	Arg	Arg	Asp	Trp	Asp	Asn	Ser
	290					295					300				
Gly	Pro	Phe	Cys	Gly	Thr	Ile	Ser	Ser	Lys	Lys	Lys	Lys	Lys	Met	Met
305					310					315					320
Tyr	Leu	Thr	Thr	Arg	Asn	Ala	Glu	Phe	Asp	Arg	His	Glu	Ile	Gln	Ile
				325					330					335	
Tyr	Glu	Glu	Val	Ala	Lys	Met	Pro	Pro	Phe	Gln	Arg	Lys	Thr	Leu	Val
			340					345					350		
Leu	Ile	Gly	Ala	Gln	Gly	Val	Gly	Arg	Arg	Ser	Leu	Lys	Asn	Arg	Phe
		355					360					365			
Ile	Val	Leu	Asn	Pro	Thr	Arg	Phe	Gly	Thr	Thr	Val	Pro	Phe	Thr	Ser
	370					375					380				
Arg	Lys	Pro	Arg	Glu	Asp	Glu	Lys	Asp	Gly	Gln	Ala	Tyr	Lys	Phe	Val
385					390					395					

465		470		475		480									
Val	Val	Asp	Ala	Gly	Ile	Thr	Thr	Lys	Leu	Leu	Thr	Asp	Ser	Asp	Leu
		485						490						495	
Lys	Lys	Thr	Val	Asp	Glu	Ser	Ala	Arg	Ile	Gln	Arg	Ala	Tyr	Asn	His
		500						505						510	
Tyr	Phe	Asp	Leu	Ile	Ile	Ile	Asn	Asp	Asn	Leu	Asp	Lys	Ala	Phe	Glu
		515					520						525		
Lys	Leu	Gln	Thr	Ala	Ile	Glu	Lys	Leu	Arg	Met	Glu	Pro	Gln	Trp	Val
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Pro	Ile	Ser	Trp	Val	Tyr										
545					550										

<210> 5229

<211> 1031

<212> DNA

<213> Homo sapiens

<400> 5229

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 120
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 180
 aagcctggaa catcacatct gtacgttgca atctgtggat cagctacgag actgagagaa
 240
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 420
 gaggtgatcg gggcaggagt aaagtggaca cctcagcaaa gccattcgct gtgatctctg
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 540
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 660
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 720
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 780
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 840
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 900
 aatggggcct tggagacagg aataaaagga aaaatctgga atggaatcac atgacgcaac
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 1020
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 1031

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<400> 5231
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120
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180
ctggtgcccc ggctccctgc cccgcgccc gtcatgacct tgcgcccctc actcctccc
240
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300
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360
tgtgccgagc ccgctgcttt tggagacacg cttcacatac actacacggg aagcttggtta
420
gatggacgta ttattgacac ctccctgacc agagaccctc tggttataga acttggccaa
480
aagcaggtga ttccaggtct ggagcagagt cttctcgaca tgtgtgtggg agagaagcga
540
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600
gcggatgcag tgggtgcagta tgacgtggag ctgattgcac taatccgagc caactactgg
660
ctaaagctgg tgaaggcat tttgcctctg gtagggatgg ccatggtgcc agccctcctg
720
ggcctcattg ggtatcacct atacagaaag gccaatagac ccaaagtctc caaaaagaag
780

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 cttaa
 845

<210> 5232
 <211> 201
 <212> PRT
 <213> Homo sapiens

<400> 5232
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 20 25 30
 Ser Pro Val Arg Thr Leu Gln Val Glu Thr Leu Val Glu Pro Pro Glu
 35 40 45
 Pro Cys Ala Glu Pro Ala Ala Phe Gly Asp Thr Leu His Ile His Tyr
 50 55 60
 Thr Gly Ser Leu Val Asp Gly Arg Ile Ile Asp Thr Ser Leu Thr Arg
 65 70 75 80
 Asp Pro Leu Val Ile Glu Leu Gly Gln Lys Gln Val Ile Pro Gly Leu
 85 90 95
 Glu Gln Ser Leu Leu Asp Met Cys Val Gly Glu Lys Arg Arg Ala Ile
 100 105 110
 Ile Pro Ser His Leu Ala Tyr Gly Lys Arg Gly Phe Pro Pro Ser Val
 115 120 125
 Pro Ala Asp Ala Val Val Gln Tyr Asp Val Glu Leu Ile Ala Leu Ile
 130 135 140
 Arg Ala Asn Tyr Trp Leu Lys Leu Val Lys Gly Ile Leu Pro Leu Val
 145 150 155 160
 Gly Met Ala Met Val Pro Ala Leu Leu Gly Leu Ile Gly Tyr His Leu
 165 170 175
 Tyr Arg Lys Ala Asn Arg Pro Lys Val Ser Lys Lys Lys Leu Lys Glu
 180 185 190
 Glu Lys Arg Asn Lys Ser Lys Lys Lys
 195 200

<210> 5233
 <211> 2801
 <212> DNA
 <213> Homo sapiens

<400> 5233
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<211> 57

<212> PRT

<213> Homo sapiens

<400> 5234

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<211> 3017

<212> DNA

<213> Homo sapiens

<400> 5235

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<210> 5236

<211> 178

<212> PRT

<213> Homo sapiens

<400> 5236

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Ala Glu Met Asp Leu Gly Thr Pro Thr Tyr Asp Glu Asn Pro Met Lys	35	40	45
Ala Ser Lys Lys Pro Lys Thr Ala Glu Ala Asp Thr Ser Ser Glu Leu	50	55	60
Ala Lys Lys Ser Lys Glu Val Phe Arg Lys Glu Met Ser Gln Phe Ile	65	70	75
Val Gln Cys Leu Asn Pro Tyr Arg Lys Pro Asp Cys Lys Val Gly Arg	85	90	95
Ile Thr Thr Thr Glu Asp Phe Lys His Leu Ala Arg Lys Leu Thr His	100	105	110
Gly Val Met Asn Lys Glu Leu Lys Tyr Cys Lys Asn Pro Glu Asp Leu	115	120	125
Glu Cys Asn Glu Asn Val Lys His Lys Thr Lys Glu Tyr Ile Lys Lys	130	135	140
Tyr Met Gln Lys Phe Gly Ala Val Tyr Lys Pro Lys Glu Asp Thr Glu	145	150	155
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Leu Glu

<210> 5237

<211> 1238

<212> DNA

<213> Homo sapiens

<400> 5237

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<210> 5238

<211> 212

<212> PRT

<213> Homo sapiens

<400> 5238

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Leu	Leu	Gly	Ile	Tyr	Ile	Ile	His	Arg	Ala	Val	Arg	Asn	Pro	Asp	Asp
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Leu	Glu	Ala	Arg	Ser	His	Met	His	Leu	Ala	Ser	Ala	Phe	Ala	Gly	Ile
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Ile	Ser	Gly	Leu	Val	Lys	Met	Tyr	Lys	Ala	Lys	Asp	Tyr	Asn	Val	Asp
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His	Pro	Leu	Val	Pro	His	Gly	Leu	Ser	Val	Val	Leu	Thr	Ser	Pro	Ala
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Val	Asp	Asp	Gly	Leu	Ala	Ala	Val	Gly	Tyr	Ser	Lys	Ala	Asp	Ile	Pro
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		180					185						190		
Pro	Arg	Pro	Gln	Ser	Glu	Glu	Asp	Leu	Ala	Ala	Leu	Phe	Glu	Ala	Ser
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<212> DNA
<213> Homo sapiens

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<210> 5240

<211> 226

<212> PRT

<213> Homo sapiens

<400> 5240

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		20						25				30			
Ser	Ala	Gly	Gly	Thr	Pro	Ser	Gly	Cys	Thr	Val	Ala	Gly	Gly	Leu	Gly
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Thr	Val	Ala	Ile	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser
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Ser	Ser	Glu	Ser	Val	Ser	Leu	Gly	Gly	Ala	Trp	Gly	Gly	Pro	Gly	Gly
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Gly	Ser	Leu	Ser	Pro	Arg	Ser	Ala	Phe	Phe	Asn	Phe	Arg	Phe	Leu	Leu
		100					105					110			
Phe	Leu	Ile	Arg	Asp	Leu	Phe	Ser	Pro	Ser	Pro	Gly	Val	Gly	Arg	Gly
		115					120					125			
Leu	Arg	Ser	Thr	Pro	Lys	Pro	Ala	Pro	Ala	Pro	Gly	Pro	Asn	Phe	Arg
		130					135				140				
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145					150				155					160	
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			165					170						175	
Asp	Val	Gly	Asp	Lys	Gly	Asp	Ala	Thr	Leu	Gly	Pro	Ser	Arg	Ser	Lys
		180					185					190			
Arg	Glu	Ser	Leu	Ser	Phe	Ile	Phe	Ser	Ser	Lys	Val	Ala	Leu	Ser	Gly

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 <211> 461
 <212> DNA
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<210> 5242
 <211> 146
 <212> PRT
 <213> Homo sapiens

<400> 5242
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 35 40 45
 Cys Thr Ala Pro Gly Ile Gly Thr Pro Cys Ser Gly Cys Ala Gly Thr
 50 55 60
 Ala Ala Pro Arg Glu Val Arg Gly Leu Leu Ser His Leu Pro Pro Ser
 65 70 75 80
 Val Val Ser Trp Arg Phe Gln Trp Phe Gly Ala Ser Leu Leu Thr Trp
 85 90 95
 Pro Ala Leu Ser Ser Ala Ser Arg Leu Trp Gly Pro Leu His Pro Gly
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145

<210> 5243
 <211> 344
 <212> DNA
 <213> Homo sapiens

<400> 5243
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 60
 tggctggacc ttacagacga gccatttggt cagaaggtaa ctgtggaccc tgacaactca
 120
 aattgcagtg aagaaagtgc taggttgctt ttgaagcttg gtgatgctgg aaaccccaga
 180
 agtcttgcta taagattcat ccttaccaat tacaacaagt tgtccatcca gagttgggtt
 240
 agtttgccgc gagtcgagat catttccaac aattcaatcc aagcagtcct taaccaact
 300
 ggcgtatatg ctccctctgg ttactcctac cgctgccaac gcgt
 344

<210> 5244
 <211> 114
 <212> PRT
 <213> Homo sapiens

<400> 5244
 Xaa Ile Pro Cys Ile Leu Phe Trp Ala Lys Arg Ile Met Ile Lys Phe
 1 5 10 15
 Lys Asn Gln Thr Trp Leu Asp Leu Thr Asp Glu Pro Phe Gly Gln Lys
 20 25 30
 Val Thr Val Asp Pro Asp Asn Ser Asn Cys Ser Glu Glu Ser Ala Arg
 35 40 45
 Leu Ser Leu Lys Leu Gly Asp Ala Gly Asn Pro Arg Ser Leu Ala Ile
 50 55 60
 Arg Phe Ile Leu Thr Asn Tyr Asn Lys Leu Ser Ile Gln Ser Trp Phe
 65 70 75 80
 Ser Leu Arg Arg Val Glu Ile Ile Ser Asn Asn Ser Ile Gln Ala Val
 85 90 95
 Phe Asn Pro Thr Gly Val Tyr Ala Pro Ser Gly Tyr Ser Tyr Arg Cys
 100 105 110
 Gln Arg

<210> 5245
 <211> 483
 <212> DNA
 <213> Homo sapiens

<400> 5245
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 60
 ctccggcccg ctaagcccg cggaacaact atgctgaaag ccaagatcct ctccgtgggg
 120

ccttgcgaga gtggaaaaac tgttttggcc aactttctga cagaatcttc tgacatcact
 180
 gaatacagcc caacccaagg agtgaggttt gagtcctgct ggccggccct gatgaaggat
 240
 gctcatggag tggatgatcgt cttcaatgct gacatcccaa gccaccggaa ggaaatggag
 300
 atgtggtatt cctgctttgt ccaacagccg tccttacagg acacacagtg tatgctaatt
 360
 gcacaccaca aaccaggctc tggagatgat aaaggaagcc tgtctttgtc gccacccttg
 420
 aacaagctga agctggtgca ctcaaacctg gaagatgacc ctgaggagat ccggatggaa
 480
 ttc
 483

<210> 5246

<211> 131

<212> PRT

<213> Homo sapiens

<400> 5246

Met	Leu	Lys	Ala	Lys	Ile	Leu	Phe	Val	Gly	Pro	Cys	Glu	Ser	Gly	Lys
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Thr	Val	Leu	Ala	Asn	Phe	Leu	Thr	Glu	Ser	Ser	Asp	Ile	Thr	Glu	Tyr
		20						25					30		
Ser	Pro	Thr	Gln	Gly	Val	Arg	Phe	Glu	Ser	Cys	Trp	Pro	Ala	Leu	Met
		35					40					45			
Lys	Asp	Ala	His	Gly	Val	Val	Ile	Val	Phe	Asn	Ala	Asp	Ile	Pro	Ser
	50					55					60				
His	Arg	Lys	Glu	Met	Glu	Met	Trp	Tyr	Ser	Cys	Phe	Val	Gln	Gln	Pro
65					70					75				80	
Ser	Leu	Gln	Asp	Thr	Gln	Cys	Met	Leu	Ile	Ala	His	His	Lys	Pro	Gly
			85						90					95	
Ser	Gly	Asp	Asp	Lys	Gly	Ser	Leu	Ser	Leu	Ser	Pro	Pro	Leu	Asn	Lys
		100					105						110		
Leu	Lys	Leu	Val	His	Ser	Asn	Leu	Glu	Asp	Asp	Pro	Glu	Glu	Ile	Arg
		115					120						125		
Met	Glu	Phe													
		130													

<210> 5247

<211> 1004

<212> DNA

<213> Homo sapiens

<400> 5247

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 60
 ctccggcccg ctaagccgcg gcggacaact atgctgaaag ccaagatcct cttcgtgggg
 120
 ccttgcgaga gtggaaaaac tgttttggcc aactttctga cagaatcttc tgacatcact
 180
 gaatacagcc caacccaagg agtgaggatc ctagaatttg agaaccgcga tgttaccagc
 240

aacaacaaag gcacgggctg tgaattcgag ctatgggact gtgggtggcga tgctaagttt
300
gagtcctgct ggccggccct gatgaaggat gctcatggag tggatgatcgt cttcaatgct
360
gacatcccaa gccaccggaa ggaaatggag atgtgggtatt cctgctttgt ccaacagccg
420
tccttacagg acacacagtg tatgctaatt gcacaccaca aaccaggctc tggagatgat
480
aaaggaagcc tgtctttgtc gccacccttg aacaagctga agctgggtgca ctcaaacctg
540
gaagatgacc ctgaggagat ccggatggaa ttcataaagt atttaaaaag cataatcaac
600
tccatgtctg agagcagaga caggaggagg atgtcaatta tgacctagcc agccttcacc
660
tggtgactgcc acatccccag tgaaatcagc atgtttctcg gtgcagatct gaaatcacat
720
ccagctcctg atgttttctt ctccctctga ctgcagagga agtgttccta cctgcaggaa
780
ggcacctgtc acacagggcg ttcactcaga ccactctgtc tctgccctga gttcagttga
840
gaaaatccta ttaatcaatt tggatttctt ggccccagaa cttcccaaag acctgtaaaa
900
tggaggggatt taccacctca catatgtcca gttaaacagt ttgtggactt gtaaccgtcg
960
cagcccaatg atacaacagt agtttaatca cgtgaaaaaa aaaa
1004

<210> 5248

<211> 185

<212> PRT

<213> Homo sapiens

<400> 5248

Met	Leu	Lys	Ala	Lys	Ile	Leu	Phe	Val	Gly	Pro	Cys	Glu	Ser	Gly	Lys
1				5					10					15	
Thr	Val	Leu	Ala	Asn	Phe	Leu	Thr	Glu	Ser	Ser	Asp	Ile	Thr	Glu	Tyr
			20					25					30		
Ser	Pro	Thr	Gln	Gly	Val	Arg	Ile	Leu	Glu	Phe	Glu	Asn	Pro	His	Val
		35					40					45			
Thr	Ser	Asn	Asn	Lys	Gly	Thr	Gly	Cys	Glu	Phe	Glu	Leu	Trp	Asp	Cys
	50				55						60				
Gly	Gly	Asp	Ala	Lys	Phe	Glu	Ser	Cys	Trp	Pro	Ala	Leu	Met	Lys	Asp
65				70					75					80	
Ala	His	Gly	Val	Val	Ile	Val	Phe	Asn	Ala	Asp	Ile	Pro	Ser	His	Arg
			85					90						95	
Lys	Glu	Met	Glu	Met	Trp	Tyr	Ser	Cys	Phe	Val	Gln	Gln	Pro	Ser	Leu
		100						105					110		
Gln	Asp	Thr	Gln	Cys	Met	Leu	Ile	Ala	His	His	Lys	Pro	Gly	Ser	Gly
		115				120						125			
Asp	Asp	Lys	Gly	Ser	Leu	Ser	Leu	Ser	Pro	Pro	Leu	Asn	Lys	Leu	Lys
	130					135					140				
Leu	Val	His	Ser	Asn	Leu	Glu	Asp	Asp	Pro	Glu	Glu	Ile	Arg	Met	Glu
145				150					155					160	
Phe	Ile	Lys	Tyr	Leu	Lys	Ser	Ile	Ile	Asn	Ser	Met	Ser	Glu	Ser	Arg

165 170 175
 Asp Arg Glu Glu Met Ser Ile Met Thr
 180 185

<210> 5249
 <211> 653
 <212> DNA
 <213> Homo sapiens

<400> 5249
 nnacgcgtgc ggcaccg cccggcaggt gctgtcctta ttcccagccc agtcaagagc
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 taccggggct ggctagtcac gggggagccc agtagagagg agtataaaat ccagtccttt
 120
 gatgcagaga cccagcagct gctgaagaca gactcaaag atccgggtgc tgtggacttg
 180
 gagaaagtgg ccaatgtgat tgtggacat tctctgcagg actgtgtgtt cagcaaggaa
 240
 gcaggacgca tgtgtacgc catcattcag gcagagagta aacaagcagg ccagagtgtc
 300
 ttccgacgtg gactcctcaa ccggctgcag caggagtacc aggctcggga gcagctgcga
 360
 gcacgctccc tgcagggctg ggtctgctat gtcaccttta tctgcaacat ctttgactac
 420
 ctgaggggtga acaacatgcc catgatggcc ctggtgaacc ctgtctatga ctgcctcttc
 480
 cggctggccc agccagacag tttagcaag gaggaggagg tggactgttt ggtgctgcag
 540
 ctgcaccggg ttggggagca gctggagaaa atgaatgggc agcgcatgga tgagctcttt
 600
 gtgctgatcc gggatggctt cctgctccca actggcctca gtcctctggc cca
 653

<210> 5250
 <211> 217
 <212> PRT
 <213> Homo sapiens

<400> 5250
 Xaa Arg Val Arg Ala Thr Gly Pro Ala Gly Ala Val Leu Ile Pro Ser
 1 5 10 15
 Pro Val Lys Ser Tyr Arg Gly Trp Leu Val Met Gly Glu Pro Ser Arg
 20 25 30
 Glu Glu Tyr Lys Ile Gln Ser Phe Asp Ala Glu Thr Gln Gln Leu Leu
 35 40 45
 Lys Thr Ala Leu Lys Asp Pro Gly Ala Val Asp Leu Glu Lys Val Ala
 50 55 60
 Asn Val Ile Val Asp His Ser Leu Gln Asp Cys Val Phe Ser Lys Glu
 65 70 75 80
 Ala Gly Arg Met Cys Tyr Ala Ile Ile Gln Ala Glu Ser Lys Gln Ala
 85 90 95
 Gly Gln Ser Val Phe Arg Arg Gly Leu Leu Asn Arg Leu Gln Gln Glu
 100 105 110
 Tyr Gln Ala Arg Glu Gln Leu Arg Ala Arg Ser Leu Gln Gly Trp Val

115	120	125
Cys Tyr Val Thr Phe Ile Cys Asn Ile Phe Asp Tyr Leu Arg Val Asn		
130	135	140
Asn Met Pro Met Met Ala Leu Val Asn Pro Val Tyr Asp Cys Leu Phe		
145	150	155
Arg Leu Ala Gln Pro Asp Ser Leu Ser Lys Glu Glu Glu Val Asp Cys		
165	170	175
Leu Val Leu Gln Leu His Arg Val Gly Glu Gln Leu Glu Lys Met Asn		
180	185	190
Gly Gln Arg Met Asp Glu Leu Phe Val Leu Ile Arg Asp Gly Phe Leu		
195	200	205
Leu Pro Thr Gly Leu Ser Ser Leu Ala		
210	215	

<210> 5251
 <211> 372
 <212> DNA
 <213> Homo sapiens

<400> 5251
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 60
 caccacagcg ggacggcact tcattatgac gatgtcccgt gcatcaacgg ctggggggaa
 120
 ccggaagacg gctttcctgc tttctgcagc agaagcttgg gagaagaagg ggcttttgaa
 180
 aaccacaggc tgtacgataa ctggccgcct ccgcacatct ttgcccgtta ctctcctgct
 240
 gacagaaagg cctctaggct gtctgtgac aagctgtcct ctaaccatta caaataccct
 300
 gcctctgctc agtctgtcac taatacctct tctgtgggga gggcgtctct cgggctcaac
 360
 tcgcagctc ag
 372

<210> 5252
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 5252
Met Asn Arg Arg Val Ile Ser Ala Asn Pro Tyr Leu Gly Gly Thr Ser
1 5 10 15
Asn Gly Tyr Ala His Pro Ser Gly Thr Ala Leu His Tyr Asp Asp Val
20 25 30
Pro Cys Ile Asn Gly Ser Gly Glu Pro Glu Asp Gly Phe Pro Ala Phe
35 40 45
Cys Ser Arg Ser Leu Gly Glu Glu Gly Ala Phe Glu Asn Pro Gly Leu
50 55 60
Tyr Asp Asn Trp Pro Pro Pro His Ile Phe Ala Arg Tyr Ser Pro Ala
65 70 75 80
Asp Arg Lys Ala Ser Arg Leu Ser Ala Asp Lys Leu Ser Ser Asn His
85 90 95
Tyr Lys Tyr Pro Ala Ser Ala Gln Ser Val Thr Asn Thr Ser Ser Val

100 105 110
 Gly Arg Ala Ser Leu Gly Leu Asn Ser Gln Pro Gln
 115 120

<210> 5253
 <211> 898
 <212> DNA
 <213> Homo sapiens

<400> 5253
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 ccacagtgc tttccagtcc agcaaatgga aatctgggga gtctatactt tgctcacaac
 120
 tcacttcaat gccatccttg tggagagcca cagtgtagt caaggttcca tccaattcac
 180
 tgtggacaag gtcttgagc aacatcacca ggctgccaag gctcagcaga aactacaggc
 240
 ctcacttca gtggctgtga actccatcat gagtattctg actggaagca ctaggagcag
 300
 cttccgaaag atgtgtctcc agacccttca agcagctgac acacaagagt tcaggaccaa
 360
 actgcacaaa gtatttctg agatcaccca acaccaattt cttcaccact gctcatgtga
 420
 ggtgaagcag cagctaacc tagaaaaaaa ggactcagcc cagggcactg aggacgcacc
 480
 tgataacagc agcctggagc tcctagcaga taccagcggg caagcagaaa acaagaggct
 540
 caagaggggc agccccgc tagaggagat gcgagctctg cgctctgcca gggccccgag
 600
 cccgtcagag gccgccccgc gccgcccga agccaccgc gcccccctca ctcctagagg
 660
 aagggagcac cgcgaggctc acggcagggc cctggcgccg ggcagggcga gcctcggaag
 720
 ccgcctggag gacgtgctgt ggctgcagga ggtctccaac ctgtcagagt ggctgagtcc
 780
 cagccctggg ccctgagccg ggtccccttc cgcaagcgcc caccgatccg gaggctgcgg
 840
 gcagccgtta tcccgtggtt taataaagct gccgcgcgct caaaaaaaaa aaaaaaaaa
 898

<210> 5254
 <211> 56
 <212> PRT
 <213> Homo sapiens

<400> 5254
 Gln Gln Pro Gly Ala Pro Ser Arg Tyr Gln Arg Ala Ser Arg Lys Gln
 1 5 10 15
 Glu Ala Gln Glu Gly Gln Pro Pro His Arg Gly Asp Ala Ser Ser Ala
 20 25 30
 Leu Cys Gln Gly Pro Glu Pro Val Arg Gly Arg Pro Ala Pro Pro Gly
 35 40 45
 Ser His Arg Gly Pro Pro His Ser

50

55

<210> 5255

<211> 1410

<212> DNA

<213> Homo sapiens

<400> 5255

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60
caaccccaga tccccatgcc tcgagccctg gatctccaag ctcagctgct ggattctgga
120
tgtcaacaaa cctcaccact ggatcctgac aaccacaatg cctggatcct ggggccccca
180
tcaactggatc ccagatcccc tcaactccacc cactggattc ctgcattggt ttttggtttt
240
ttgttttttt ttaacctcga cactgggtct cagatccttc tgctgactgc cagatccctg
300
catttcaagc actacgcctt ccacccccag gcactggatc ccagattccc aagccttcac
360
ccaccagatt ctggctccta aaacaagtgc gggggcccca gtggcacagc aagtggatcc
420
tggcaactgc agctgctgga ttccagattc tgggtcccca atccctctgc ccagtccctc
480
aatgttgaaa cctcatctct tgaaggcaga tcctgatatt ccaaggcact gaatcccaag
540
ccctgaatcc cgggtttctg atctgaatct tccaggcgcc ggggtccaaa tgttcaggcc
600
ccaagtctag atcctggcag cccagtcaca gagtatccca cacacactgg tgcccagagc
660
cggctttctca tgacatgaaa ttgcatggtc gagggagtct gtggggaagg aagcccaggt
720
cctggctgca acctgcacgg atgctggatt cccctcacc ccacctctgc atggccaccc
780
cctcccagcc ctgtggggaa actgttcctt ggaaccactc cactccctgc atccccacac
840
ttcacagcat cttccatccc cctcccacct tctaggcgaa tagtccccag agctgtgttc
900
ctccaagggg tccgaggaat cactcactcc tggaggctgg caaggagaca gtctgaggcc
960
agggacacat gaagggatgt cccaccccca gcactatcag ggcctcccca ggcttcaga
1020
gttgaaagcc aggagaaaat cggcaaagac cacccttccc taaaccaag cacccaatga
1080
tgcaaaaaac aaaaacaaaa aaaaccacca aatccccaaa ttcattccag atctattttt
1140
ctaccagaga gaggagcaaa gtcctcctcc cctgcgcctt tacattctgc acttcatagt
1200
tggattctga gcttaggatc atctggagac cccatggagg gacttggaag ggggaactgg
1260
gatttgggga ggggctggag gacttccgca cgcttcacc tccttcgacc tccactgcgc
1320
ccacctccc tgctgtgtg tgttatttca aaggaaaaga acaaaaggaa taaattttct
1380

aagctcttta aaaaaaaaaa aaaaaaaaaa
1410

<210> 5256
<211> 95
<212> PRT
<213> Homo sapiens

<400> 5256
Met Val Glu Gly Val Cys Gly Glu Gly Ser Pro Gly Pro Gly Cys Asn
1 5 10 15
Leu His Gly Cys Trp Ile Pro Pro His Pro Thr Ser Ala Trp Pro Pro
20 25 30
Pro Pro Ser Pro Val Gly Lys Leu Phe Pro Gly Thr Thr Pro Leu Pro
35 40 45
Ala Ser Pro His Phe Thr Ala Ser Ser Ile Pro Leu Pro Pro Ser Arg
50 55 60
Arg Ile Val Pro Arg Ala Val Phe Leu Gln Gly Val Arg Gly Ile Thr
65 70 75 80
His Ser Trp Arg Leu Ala Arg Arg Gln Ser Glu Ala Arg Asp Thr
85 90 95

<210> 5257
<211> 1366
<212> DNA
<213> Homo sapiens

<400> 5257
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accccgcccc gcagtggcgg gggcctgctc ccagcttctg gctgtcacgg acctgccgcc
120
tcctcctact ccgcatccgc cgagcctgcc cgggtccgcg gccttgtcta tgggcaccac
180
ggggatccag ccaaggtcgt cgaactcaag aacctggagc tagctgctgt gagaggatca
240
gatgtccgtg tgaagatgct ggcggcccct atcaatccat ctgacataaa tatgatccaa
300
ggaaactacg gactccttcc tgaactgcct gctgttggag ggaacgaagg tgttgcacag
360
gtggtagcgg tgggcagcaa tgtgaccggg ctgaagccag gagactgggt gattccagca
420
aatgctgggt tagactcagg aacctggcgg accgaggctg tgttcagcga ggaagcactg
480
atccaagttc cgagtgcacat ccctcttcag agcgctgccca ccctgggtgt caatccctgc
540
acagcctaca ggatgttgat ggacttcgag caactgcagc caggggatcc tgtcatccag
600
aatgcatcca acagcggagt ggggcaagca gtcacccaga tcgccgcagc cctgggccta
660
agaaccatca atgtggtccg agacagacct gatatccaga agctgagtga cagactgaag
720
agtctggggg ctgagcatgt catcacagaa gaggagctaa gaaggcccg aatgaaaaac
780

ttctttaagg acatgccccca gccacggctt gctctcaact gtgttggtgg gaaaagctcc
 840
 acagagctgc tgcggcagtt agcgcgtgga ggaacatgg taacctatgg ggggatggcc
 900
 aagcagcccg tcgtagcctc tgtgagcctg ctcattttta aggatctcaa acttcgaggc
 960
 ttttggttgt cccagtggaa gaaggatcac agtccagacc agttcaagga gctgacctc
 1020
 acactgtgcg atctcatccg ccgaggccag ctcacagccc ctgctgctc ccaggctccg
 1080
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 1260
 cactgcctct tcctattagg aggatggtga agccagccac ggttttcccc agggccagcc
 1320
 ttaaggatc taataaagtc tgaactctcc cttccaaaaa aaaaaa
 1366

<210> 5258

<211> 375

<212> PRT

<213> Homo sapiens

<400> 5258

Met	Trp	Val	Cys	Ser	Thr	Leu	Trp	Arg	Val	Arg	Thr	Pro	Pro	Gly	Ser
1				5					10					15	
Gly	Gly	Gly	Leu	Leu	Pro	Ala	Ser	Gly	Cys	His	Gly	Pro	Ala	Ala	Ser
			20					25					30		
Ser	Tyr	Ser	Ala	Ser	Ala	Glu	Pro	Ala	Arg	Val	Arg	Gly	Leu	Val	Tyr
		35					40					45			
Gly	His	His	Gly	Asp	Pro	Ala	Lys	Val	Val	Glu	Leu	Lys	Asn	Leu	Glu
	50					55					60				
Leu	Ala	Ala	Val	Arg	Gly	Ser	Asp	Val	Arg	Val	Lys	Met	Leu	Ala	Ala
65					70				75					80	
Pro	Ile	Asn	Pro	Ser	Asp	Ile	Asn	Met	Ile	Gln	Gly	Asn	Tyr	Gly	Leu
				85				90						95	
Leu	Pro	Glu	Leu	Pro	Ala	Val	Gly	Gly	Asn	Glu	Gly	Val	Ala	Gln	Val
			100					105					110		
Val	Ala	Val	Gly	Ser	Asn	Val	Thr	Gly	Leu	Lys	Pro	Gly	Asp	Trp	Val
		115					120					125			
Ile	Pro	Ala	Asn	Ala	Gly	Leu	Asp	Ser	Gly	Thr	Trp	Arg	Thr	Glu	Ala
	130					135					140				
Val	Phe	Ser	Glu	Glu	Ala	Leu	Ile	Gln	Val	Pro	Ser	Asp	Ile	Pro	Leu
145					150				155					160	
Gln	Ser	Ala	Ala	Thr	Leu	Gly	Val	Asn	Pro	Cys	Thr	Ala	Tyr	Arg	Met
				165				170					175		
Leu	Met	Asp	Phe	Glu	Gln	Leu	Gln	Pro	Gly	Asp	Ser	Val	Ile	Gln	Asn
			180					185					190		
Ala	Ser	Asn	Ser	Gly	Val	Gly	Gln	Ala	Val	Ile	Gln	Ile	Ala	Ala	Ala
		195					200					205			
Leu	Gly	Leu	Arg	Thr	Ile	Asn	Val	Val	Arg	Asp	Arg	Pro	Asp	Ile	Gln

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      210              215              220
Lys Leu Ser Asp Arg Leu Lys Ser Leu Gly Ala Glu His Val Ile Thr
225              230              235              240
Glu Glu Glu Leu Arg Arg Pro Glu Met Lys Asn Phe Phe Lys Asp Met
      245              250              255
Pro Gln Pro Arg Leu Ala Leu Asn Cys Val Gly Gly Lys Ser Ser Thr
      260              265              270
Glu Leu Leu Arg Gln Leu Ala Arg Gly Gly Thr Met Val Thr Tyr Gly
      275              280              285
Gly Met Ala Lys Gln Pro Val Val Ala Ser Val Ser Leu Leu Ile Phe
      290              295              300
Lys Asp Leu Lys Leu Arg Gly Phe Trp Leu Ser Gln Trp Lys Lys Asp
305              310              315              320
His Ser Pro Asp Gln Phe Lys Glu Leu Ile Leu Thr Leu Cys Asp Leu
      325              330              335
Ile Arg Arg Gly Gln Leu Thr Ala Pro Ala Cys Ser Gln Val Pro Leu
      340              345              350
Gln Asp Tyr Gln Ser Ala Leu Glu Ala Ser Met Lys Pro Phe Ile Ser
      355              360              365
Ser Lys Gln Ile Leu Thr Met
      370              375

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<210> 5259
 <211> 306
 <212> DNA
 <213> Homo sapiens

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<400> 5259
ctgaattgct gtagggcag aacaccaag gagacaatag aaaatttggt gcacagaatg
60
actgaagaga agacgctgac tgctgagggt ttggtaaaac tcctccaggc tgtgaagacg
120
actttcccaa acctgggcct tctgctagag aagttgcaga aatcagccac tttgccaagc
180
accacagtcc aaccaagccc tgatgattat gggactgagc tattgagacg ctatcatgaa
240
aacctctctg agattttcac agacaaccag attttattaa agatgatctc acacatgaca
300
agttta
306

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<210> 5260
 <211> 83
 <212> PRT
 <213> Homo sapiens

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<400> 5260
Met Thr Glu Glu Lys Thr Leu Thr Ala Glu Gly Leu Val Lys Leu Leu
1      5      10      15
Gln Ala Val Lys Thr Thr Phe Pro Asn Leu Gly Leu Leu Leu Glu Lys
      20      25      30
Leu Gln Lys Ser Ala Thr Leu Pro Ser Thr Thr Val Gln Pro Ser Pro
      35      40      45
Asp Asp Tyr Gly Thr Glu Leu Leu Arg Arg Tyr His Glu Asn Leu Ser

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50	55	60
Glu Ile Phe Thr Asp Asn Gln Ile Leu Leu Lys Met Ile Ser His Met		
65	70	75
Thr Ser Leu		

<210> 5261
 <211> 2394
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<212> PRT

<213> Homo sapiens

<400> 5262

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<400> 5264

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<211> 3203

<212> DNA

<213> Homo sapiens

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<211> 853

<212> PRT

<213> Homo sapiens

<400> 5266

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 65 70 75 80
 Glu Glu Thr Thr Thr Thr Ile Ile Thr Thr Thr Thr Val Thr Thr Thr
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 Val Thr Ser Pro Val Leu Cys Asn Asn Asn Ile Ser Glu Gly Glu Gly
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 Tyr Val Glu Ser Pro Asp Leu Gly Ser Pro Val Ser Arg Thr Leu Gly
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<213> Homo sapiens

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<210> 5270
<211> 327
<212> PRT
<213> Homo sapiens

<400> 5270

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Gln Pro Ile Ser Glu Glu Glu Ala Ile Gln Ile Ile Ala Asp Pro Pro
          35           40           45
Leu Pro Pro Ala Ser Phe Thr Leu Arg Asp Tyr Val Asp His Ser Glu
          50           55           60
Thr Leu Gln Lys Leu Val Leu Leu Gly Val Asp Leu Ser Lys Ile Glu
65           70           75           80
Lys His Pro Glu Ala Ala Asn Leu Leu Leu Arg Leu Asp Phe Glu Lys
          85           90           95
Asp Ile Lys Gln Met Leu Leu Phe Leu Lys Asp Val Gly Ile Glu Asp
          100          105          110
Asn Gln Leu Gly Ala Phe Leu Thr Lys Asn His Ala Ile Phe Ser Glu
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Asp Leu Glu Asn Leu Lys Thr Arg Val Ala Tyr Leu His Ser Lys Asn
          130          135          140
Phe Ser Lys Ala Asp Val Ala Gln Met Val Arg Lys Ala Pro Phe Leu
145          150          155          160
Leu Asn Phe Ser Val Glu Arg Leu Asp Asn Arg Leu Gly Phe Phe Gln
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Lys Glu Leu Glu Leu Ser Val Lys Lys Thr Arg Asp Leu Val Val Arg
          180          185          190
Leu Pro Arg Leu Leu Thr Gly Ser Leu Glu Pro Val Lys Glu Asn Met
          195          200          205
Lys Val Tyr Arg Leu Glu Leu Gly Phe Lys His Asn Glu Ile Gln His
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Met Ile Thr Arg Ile Pro Lys Met Leu Thr Ala Asn Lys Met Lys Leu
225          230          235          240
Thr Glu Thr Phe Asp Phe Val His Asn Val Met Ser Ile Pro His His
          245          250          255
Ile Ile Val Lys Phe Pro Gln Val Phe Asn Thr Arg Leu Phe Lys Val
          260          265          270
Lys Glu Arg His Leu Phe Leu Thr Tyr Leu Gly Arg Ala Gln Tyr Asp
          275          280          285
Pro Ala Lys Pro Asn Tyr Ile Ser Leu Asp Lys Leu Val Ser Ile Pro
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<210> 5271

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<212> DNA

<213> Homo sapiens

<400> 5271

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120

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<213> Homo sapiens

<400> 5272

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			20					25					30		
Glu	Cys	Gly	Asn	Val	Thr	Gly	Ala	Ser	Ser	Pro	Ser	Arg	Thr	Pro	Phe
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	50				55					60					
Val	Ala	Ile	Gln	Ser	Val	Ser	Ala	Trp	Pro	Glu	Lys	Arg	Gly	Glu	Ile
65				70					75				80		
Arg	Arg	Met	Met	Glu	Val	Ala	Ala	Ala	Asp	Val	Lys	Gln	Leu	Gly	Gly

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 Gln Lys Lys Thr Val Cys Ile Tyr Gly His Leu Asp Val Gln Pro Ala
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 His Ser His Lys Lys Asp Ile Leu Met His Arg Trp Arg Tyr Pro Ser
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<210> 5273

<211> 4580

<212> DNA

<213> Homo sapiens

<400> 5273

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<210> 5274

<211> 185

<212> PRT

<213> Homo sapiens

<400> 5274

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			20					25					30		
Val	Thr	Pro	Arg	Ile	Tyr	Val	Gly	Asn	Ala	Ser	Val	Ala	Gln	Asp	Ile
			35				40						45		
Pro	Lys	Leu	Gln	Lys	Leu	Gly	Ile	Thr	His	Val	Leu	Asn	Ala	Ala	Glu
			50				55					60			
Gly	Arg	Ser	Phe	Met	His	Val	Asn	Thr	Asn	Ala	Asn	Phe	Tyr	Lys	Asp

65		70		75		80									
Ser	Gly	Ile	Thr	Tyr	Leu	Gly	Ile	Lys	Ala	Asn	Asp	Thr	Gln	Glu	Phe
		85				90							95		
Asn	Leu	Ser	Ala	Tyr	Phe	Glu	Arg	Ala	Ala	Asp	Phe	Ile	Asp	Gln	Ala
		100				105							110		
Leu	Ala	Gln	Lys	Asn	Gly	Arg	Val	Leu	Val	His	Cys	Arg	Glu	Gly	Tyr
		115				120							125		
Ser	Arg	Ser	Pro	Thr	Leu	Val	Ile	Ala	Tyr	Leu	Met	Met	Arg	Gln	Lys
		130				135							140		
Met	Asp	Val	Lys	Ser	Ala	Leu	Ser	Ile	Val	Arg	Gln	Asn	Arg	Glu	Ile
		145				150							155		160
Gly	Pro	Asn	Asp	Gly	Phe	Leu	Ala	Gln	Leu	Cys	Gln	Leu	Asn	Asp	Arg
				165				170						175	
Leu	Ala	Lys	Glu	Gly	Lys	Leu	Lys	Pro							
		180						185							

<210> 5275

<211> 810

<212> DNA

<213> Homo sapiens

<400> 5275

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<210> 5276

<211> 125

<212> PRT

<213> Homo sapiens

<400> 5276

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Val Asn Arg Ile Leu Tyr Ile Arg Asn Leu Pro Tyr Lys Ile Thr Ala
      20           25           30
Glu Glu Met Tyr Asp Ile Phe Gly Lys Tyr Gly Pro Ile Arg Gln Ile
      35           40           45
Arg Val Gly Asn Thr Pro Glu Thr Arg Gly Thr Ala Tyr Val Val Tyr
      50           55           60
Glu Asp Ile Phe Asp Ala Lys Asn Ala Cys Asp His Leu Ser Gly Phe
65           70           75           80
Asn Val Cys Asn Arg Tyr Leu Val Val Leu Tyr Tyr Asn Ala Asn Arg
      85           90           95
Ala Phe Gln Lys Met Asp Thr Lys Lys Lys Glu Glu Gln Leu Lys Leu
      100          105          110
Leu Lys Glu Lys Tyr Gly Ile Asn Thr Asp Pro Pro Lys
      115          120          125

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<210> 5277

<211> 612

<212> DNA

<213> Homo sapiens

<400> 5277

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<210> 5278

<211> 123

<212> PRT

<213> Homo sapiens

<400> 5278

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          20          25          30
Val Lys Tyr Asp Pro His Thr Leu Thr Leu Ser Leu Pro Phe Tyr Ile
          35          40          45
Ser Gln Cys Trp Thr Leu Gly Ser Val Leu Ala Leu Thr Trp Thr Val
          50          55          60
Trp Arg Phe Phe Leu Arg Asp Ile Thr Leu Arg Tyr Lys Glu Thr Arg
65          70          75          80
Trp Gln Lys Trp Gln Asn Lys Asp Asp Gln Gly Ser Thr Val Gly Asn
          85          90          95
Gly Asp Gln His Pro Leu Gly Leu Asp Glu Asp Leu Leu Gly Pro Gly
          100         105         110
Val Ala Glu Gly Glu Gly Ala Pro Thr Pro Asn
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<210> 5279

<211> 1225

<212> DNA

<213> Homo sapiens

<400> 5279

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660
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720
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780
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900

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 1080
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<210> 5280
 <211> 408
 <212> PRT
 <213> Homo sapiens

<400> 5280
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 35 40 45
 Gly His Lys Val Leu Ile Phe Ser Gln Met Val Arg Cys Leu Asp Ile
 50 55 60
 Leu Glu Asp Tyr Leu Ile Gln Arg Arg Tyr Thr Tyr Glu Arg Ile Asp
 65 70 75 80
 Gly Arg Val Arg Gly Asn Leu Arg Gln Ala Ala Ile Asp Arg Phe Ser
 85 90 95
 Lys Pro Asp Ser Asp Arg Phe Val Phe Leu Leu Cys Thr Arg Ala Gly
 100 105 110
 Gly Leu Gly Ile Asn Leu Thr Ala Ala Asp Thr Cys Ile Ile Phe Asp
 115 120 125
 Ser Asp Trp Asn Pro Gln Asn Asp Leu Gln Ala Gln Ala Arg Cys His
 130 135 140
 Arg Ile Gly Gln Ser Lys Ala Val Lys Val Tyr Arg Leu Ile Thr Arg
 145 150 155 160
 Asn Ser Tyr Glu Arg Glu Met Phe Asp Lys Ala Ser Leu Lys Leu Gly
 165 170 175
 Leu Asp Lys Ala Val Leu Gln Thr Ser Thr Glu Arg Ala Ala Pro Met
 180 185 190
 Gly Thr Ala Leu Ser Lys Met Glu Val Glu Asp Leu Leu Arg Lys Gly
 195 200 205
 Ala Tyr Gly Ala Leu Met Asp Glu Glu Asp Glu Gly Ser Lys Phe Cys
 210 215 220
 Glu Glu Asp Ile Asp Gln Ile Leu Gln Arg Arg Thr His Thr Ile Thr
 225 230 235 240
 Ile Gln Ser Glu Gly Lys Gly Ser Thr Phe Ala Lys Ala Ser Phe Val
 245 250 255
 Ala Ser Gly Asn Arg Thr Asp Ile Ser Leu Asp Asp Pro Asn Phe Trp
 260 265 270
 Gln Lys Trp Ala Lys Ile Ala Glu Leu Asp Thr Glu Ala Lys Asn Glu

275	280	285
Lys Glu Ser Leu Val Ile Asp Arg Pro Arg Val Arg Lys Gln Thr Lys		
290	295	300
His Tyr Asn Ser Phe Glu Glu Asp Glu Leu Met Glu Phe Ser Glu Leu		
305	310	315
Asp Ser Asp Ser Asp Glu Arg Pro Thr Arg Ser Arg Arg Leu Asn Asp		
325	330	335
Lys Ala Arg Arg Tyr Leu Arg Ala Glu Cys Phe Arg Val Glu Lys Asn		
340	345	350
Leu Leu Ile Phe Gly Trp Gly Arg Trp Lys Asp Ile Leu Thr His Gly		
355	360	365
Arg Phe Lys Trp His Leu Asn Glu Lys Asp Met Glu Met Ile Cys Arg		
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405		

<210> 5281

<211> 336

<212> DNA

<213> Homo sapiens

<400> 5281

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 180
 aagagaaaac acaacgcagtg tcattaatga gacatcacat gggacaatca ttgtccaaag
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 336

<210> 5282

<211> 91

<212> PRT

<213> Homo sapiens

<400> 5282

Met Gln Thr Ala Gln Asn Lys Tyr Gln Glu Leu Lys Asn Ile Cys Ser	
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Tyr Arg Ala Gln Ala Phe Leu Val Leu Thr Gly Leu Thr Ala Thr Val	
20	30
Gly Asp Thr Ala Ile Ser Ser Glu Glu Lys Thr Gln Arg Met Ser Leu	
35	45
Met Arg His His Met Gly Gln Ser Leu Ser Lys Glu Val Ala His Val	
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Leu Thr Lys Pro Gly Ala Asp His Asp Trp Glu Asn Leu Glu Lys Asp	
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Leu Arg Leu Leu Ile Asn Gly Asp Tyr Glu Glu	

85

90

<210> 5283
<211> 1989
<212> DNA
<213> Homo sapiens

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240
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360
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420
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480
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540
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720
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1020
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1080
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1380

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 1740
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 1860
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 1920
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 1989

<210> 5284

<211> 258

<212> PRT

<213> Homo sapiens

<400> 5284

Met	Asp	Gly	Ile	Ile	Glu	Gln	Lys	Ser	Met	Leu	Val	His	Ser	Lys	Ile
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Ser	Asp	Ala	Gly	Lys	Arg	Asn	Gly	Leu	Ile	Asn	Thr	Arg	Asn	Leu	Met
		20						25					30		
Ala	Glu	Ser	Arg	Asp	Gly	Leu	Val	Ser	Val	Tyr	Pro	Ala	Pro	Gln	Tyr
		35				40						45			
Gln	Ser	His	Arg	Val	Gly	Ala	Ser	Thr	Val	Pro	Ala	Ser	Leu	Asp	Ser
		50				55				60					
Ser	Arg	Ser	Glu	Pro	Met	Gln	Gln	Leu	Leu	Asp	Pro	Asn	Thr	Leu	Gln
65					70					75				80	
Gln	Ser	Val	Glu	Ser	Arg	Tyr	Arg	Pro	Asn	Ile	Ile	Leu	Tyr	Ser	Glu
			85					90					95		
Gly	Val	Leu	Arg	Ser	Trp	Gly	Asp	Gly	Val	Ala	Ala	Asp	Cys	Cys	Glu
		100						105					110		
Thr	Thr	Phe	Ile	Glu	Asp	Arg	Ser	Pro	Thr	Lys	Asp	Ser	Leu	Glu	Tyr
		115				120						125			
Pro	Asp	Gly	Lys	Phe	Ile	Asp	Leu	Ser	Ala	Asp	Asp	Ile	Lys	Ile	His
		130				135						140			
Thr	Leu	Ser	Tyr	Asp	Val	Glu	Glu	Glu	Glu	Glu	Phe	Gln	Glu	Leu	Glu
145					150					155				160	
Ser	Asp	Tyr	Ser	Ser	Asp	Thr	Glu	Ser	Glu	Asp	Asn	Phe	Leu	Met	Met
			165						170					175	
Pro	Pro	Arg	Asp	His	Leu	Gly	Leu	Ser	Val	Phe	Ser	Met	Leu	Cys	Cys
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<210> 5285
<211> 2155
<212> DNA
<213> Homo sapiens
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4454

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 1320
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 1380
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 1440
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 1560
 aactatgtac accggattgg ccgcaccggg cgctcgggaa acacaggcat cgccactacc
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 1800
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 1860
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 1980
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<210> 5286

<211> 628

<212> PRT

<213> Homo sapiens

<400> 5286

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Ala	Arg	Thr	Asp	Glu	Val	Pro	Ala	Gly	Gly	Ser	Arg	Ser	Glu	Ala	Glu
		20						25					30		
Asp	Glu	Asp	Asp	Glu	Asp	Tyr	Val	Pro	Tyr	Val	Pro	Leu	Arg	Gln	Arg
		35				40						45			
Arg	Gln	Leu	Leu	Leu	Gln	Lys	Leu	Leu	Gln	Arg	Arg	Arg	Lys	Gly	Ala
		50				55					60				
Ala	Glu	Glu	Glu	Gln	Gln	Asp	Ser	Gly	Ser	Glu	Pro	Arg	Gly	Asp	Glu
65					70					75				80	
Asp	Asp	Ile	Pro	Leu	Gly	Pro	Gln	Ser	Asn	Val	Ser	Leu	Leu	Asp	Gln
			85						90					95	
His	Gln	His	Leu	Lys	Glu	Lys	Ala	Glu	Ala	Arg	Lys	Glu	Ser	Ala	Lys

100 105 110
 Glu Lys Gln Leu Lys Glu Glu Glu Lys Ile Leu Glu Ser Val Ala Glu
 115 120 125
 Gly Arg Ala Leu Met Ser Val Lys Glu Met Ala Lys Gly Ile Thr Tyr
 130 135 140
 Asp Asp Pro Ile Lys Thr Ser Trp Thr Pro Pro Arg Tyr Val Leu Ser
 145 150 155 160
 Met Ser Glu Glu Arg His Glu Arg Val Arg Lys Lys Tyr His Ile Leu
 165 170 175
 Val Glu Gly Asp Gly Ile Pro Pro Pro Ile Lys Ser Phe Lys Glu Met
 180 185 190
 Lys Phe Pro Ala Ala Ile Leu Arg Gly Leu Lys Lys Lys Gly Ile His
 195 200 205
 His Pro Thr Pro Ile Gln Ile Gln Gly Ile Pro Thr Ile Leu Ser Gly
 210 215 220
 Arg Asp Met Ile Gly Ile Ala Phe Thr Gly Ser Gly Lys Thr Leu Val
 225 230 235 240
 Phe Thr Leu Pro Val Ile Met Phe Cys Leu Glu Gln Glu Lys Arg Leu
 245 250 255
 Pro Phe Ser Lys Arg Glu Gly Pro Tyr Gly Leu Ile Ile Cys Pro Ser
 260 265 270
 Arg Glu Leu Ala Arg Gln Thr His Gly Ile Leu Glu Tyr Tyr Cys Arg
 275 280 285
 Leu Leu Gln Glu Asp Ser Ser Pro Leu Leu Arg Cys Ala Leu Cys Ile
 290 295 300
 Gly Gly Met Ser Val Lys Glu Gln Met Glu Thr Ile Arg His Gly Val
 305 310 315 320
 His Met Met Val Ala Thr Pro Gly Arg Leu Met Asp Leu Leu Gln Lys
 325 330 335
 Lys Met Val Ser Leu Asp Ile Cys Arg Tyr Leu Ala Leu Asp Glu Ala
 340 345 350
 Asp Arg Met Ile Asp Met Gly Phe Glu Gly Asp Ile Arg Thr Ile Phe
 355 360 365
 Ser Tyr Phe Lys Gly Gln Arg Gln Thr Leu Leu Phe Ser Ala Thr Met
 370 375 380
 Pro Lys Lys Ile Gln Asn Phe Ala Lys Ser Ala Leu Val Lys Pro Val
 385 390 395 400
 Thr Ile Asn Val Gly Arg Ala Gly Ala Ala Ser Leu Asp Val Ile Gln
 405 410 415
 Glu Val Glu Tyr Val Lys Glu Glu Ala Lys Met Val Tyr Leu Leu Glu
 420 425 430
 Cys Leu Gln Lys Thr Pro Pro Pro Val Leu Ile Phe Ala Glu Lys Lys
 435 440 445
 Ala Asp Val Asp Ala Ile His Glu Tyr Leu Leu Leu Lys Gly Val Glu
 450 455 460
 Ala Val Ala Ile His Gly Gly Lys Asp Gln Glu Glu Arg Thr Lys Ala
 465 470 475 480
 Ile Glu Ala Phe Arg Glu Gly Lys Lys Asp Val Leu Val Ala Thr Asp
 485 490 495
 Val Ala Ser Lys Gly Leu Asp Phe Pro Ala Ile Gln His Val Ile Asn
 500 505 510
 Tyr Asp Met Pro Glu Glu Ile Glu Asn Tyr Val His Arg Ile Gly Arg
 515 520 525
 Thr Gly Arg Ser Gly Asn Thr Gly Ile Ala Thr Thr Phe Ile Asn Lys

530 535 540
 Ala Cys Asp Glu Ser Val Leu Met Asp Leu Lys Ala Leu Leu Leu Glu
 545 550 555 560
 Ala Lys Gln Lys Val Pro Pro Val Leu Gln Val Leu His Cys Gly Asp
 565 570 575
 Glu Ser Met Leu Asp Ile Gly Gly Glu Arg Gly Cys Ala Phe Cys Gly
 580 585 590
 Gly Leu Gly His Arg Ile Thr Asp Cys Pro Lys Leu Glu Ala Met Gln
 595 600 605
 Thr Lys Gln Val Ser Asn Ile Gly Arg Lys Asp Tyr Leu Ala His Ser
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 Ser Met Asp Phe
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<210> 5287
 <211> 581
 <212> DNA
 <213> Homo sapiens

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<210> 5288
 <211> 193
 <212> PRT
 <213> Homo sapiens

<400> 5288
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 Glu Pro Pro Ala Ser Pro Ala Pro His Ser Ile Pro Thr Gly Trp Gly
 20 25 30
 Arg Ala Arg Cys Gly Cys Val Gly Ser Gly Ala Glu Leu Gln Asn Pro
 35 40 45
 Arg Thr His Phe Val Leu Ser Pro His Cys Phe Met Gly Gly Ile Met

50 55 60
 Ala Pro Lys Asp Ile Met Thr Asn Thr His Ala Lys Ser Ile Leu Asn
 65 70 75 80
 Ser Met Asn Ser Leu Arg Lys Ser Asn Thr Leu Cys Asp Val Thr Leu
 85 90 95
 Arg Val Glu Gln Lys Asp Phe Pro Ala His Arg Ile Val Leu Ala Ala
 100 105 110
 Cys Ser Asp Tyr Phe Cys Ala Met Phe Thr Ser Glu Leu Ser Glu Lys
 115 120 125
 Gly Lys Pro Tyr Val Asp Ile Gln Gly Leu Thr Ala Ser Thr Met Glu
 130 135 140
 Ile Leu Leu Asp Phe Val Tyr Thr Glu Thr Val His Val Thr Val Glu
 145 150 155 160
 Asn Val Gln Glu Leu Leu Pro Ala Ala Cys Leu Leu Gln Leu Lys Gly
 165 170 175
 Val Lys Gln Ala Cys Cys Glu Phe Leu Glu Ser Gln Leu Asp Pro Ser
 180 185 190
 Arg

<210> 5289
 <211> 361
 <212> DNA
 <213> Homo sapiens

<400> 5289
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 361

<210> 5290
 <211> 95
 <212> PRT
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<400> 5290
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 Lys Lys Leu Ile Leu Ile Gly Ala Thr Leu Lys Lys Lys Leu Glu His
 35 40 45
 Gly Leu Thr Arg Ile Trp Gln Asp Val Gln Leu Lys Val Lys Thr Tyr

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Leu	Leu	Gly	Thr	Asp	Leu
		Ser	Ile	Phe	Lys
				Tyr	Asp
				Asp	Phe
				Ile	Phe
65		70		75	80
Val	Leu	Asp	Ile	Ile	Ser
				Arg	Leu
				Met	Gln
				Val	Gly
				Glu	Glu
					Phe
		85		90	95

<210> 5291
 <211> 767
 <212> DNA
 <213> Homo sapiens

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<210> 5292
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 5292
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 20 25 30
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 35 40 45
 Met Val Ala Ser Val Ala Gly Gly Leu Gln Ala Gly Leu Asp Gly Glu
 50 55 60
 Ser Arg Gly Trp Ser Gly Gly Arg Gly Gln Pro His Pro Gly Gly Ala

65					70					75				80
Arg	Gly	Gln	Arg	His	Thr	Val	Ala	Ala	Pro	Ala	Xaa	Arg	Ala	Arg
				85					90				95	
Gly	Ala	Glu	Pro	His	Ala	Ala	Ala	Ala	Pro	Arg	Arg	Leu	Pro	His
			100					105				110		
Pro	Pro	Pro	Arg	Ala	Gly	His	Pro	Ala	Pro	Gln	Leu	Ala	Gly	Trp
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Gln	Ala	Pro	Arg	Leu	Lys	Arg	Thr	Val	Pro	Val	Arg	Arg	Ser	
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<210> 5293

<211> 1428

<212> DNA

<213> Homo sapiens

<400> 5293

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<212> PRT

<213> Homo sapiens

<400> 5530

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<211> 176

<212> PRT

<213> Homo sapiens

<400> 5528

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<211> 2602

<212> DNA

<213> Homo sapiens

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<211> 102

<212> PRT

<213> Homo sapiens

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 980 985 990
 Ser His Pro Thr Ala Ser Ala Leu Ser Thr Gly Ser Pro Pro Met Lys
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 Asn Pro Ser His Pro Thr Ala Ser Thr Leu Ser Met Gly Leu Pro Pro
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 Ser Arg Thr Pro Ser His Pro Thr Ala Thr Val Leu Ser Thr Gly Ser
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 Pro Pro Ser Glu Ser Pro Ser Arg Thr Gly Ser Ala Ala Ser Gly Ser
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 Ser Asp Ser Ser Ile Tyr Leu Thr Ser Ser Val Tyr Ser Ser Lys Ile
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 1125 1130 1135
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 1140 1145 1150
 Trp Ile Gln Ser Gln Thr Val Thr Gln Glu Ile Asp Ile Gln Ala Cys
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<212> DNA

<213> Homo sapiens

<400> 5525

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 Thr Ser Ser Ser Ser Glu Glu Asp Lys Gln Asn His Lys Ala Asp Asp
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<212> PRT

<213> Homo sapiens

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<210> 5523
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<212> DNA
<213> Homo sapiens
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<210> 5522

<211> 441

<212> PRT

<213> Homo sapiens

<400> 5522

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			20					25					30		
Ser	Ser	Lys	Asn	Val	Arg	Val	Asn	Cys	Leu	Asp	Glu	Asn	Gly	Met	Thr
		35					40					45			
Pro	Leu	Met	His	Ala	Ala	Tyr	Lys	Gly	Lys	Leu	Asp	Met	Cys	Lys	Leu
		50				55					60				
Leu	Leu	Arg	His	Gly	Ala	Asp	Val	Asn	Cys	His	Gln	His	Glu	His	Gly
65				70					75					80	
Tyr	Thr	Ala	Leu	Met	Phe	Ala	Ala	Leu	Ser	Gly	Asn	Lys	Asp	Ile	Thr
			85					90					95		
Trp	Val	Met	Leu	Glu	Ala	Gly	Ala	Glu	Thr	Asp	Val	Val	Asn	Ser	Val
		100						105					110		
Gly	Arg	Thr	Ala	Ala	Gln	Met	Ala	Ala	Phe	Val	Gly	Gln	His	Asp	Cys
		115				120						125			
Val	Thr	Ile	Ile	Asn	Asn	Phe	Phe	Pro	Arg	Glu	Arg	Leu	Asp	Tyr	Tyr
		130				135					140				
Thr	Lys	Pro	Gln	Gly	Leu	Asp	Lys	Glu	Pro	Lys	Leu	Pro	Pro	Lys	Leu

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85

<210> 5519
 <211> 401
 <212> DNA
 <213> Homo sapiens

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 120
 ccatgcgct cactacttac catgttcttg cgggcattcc cctcccgaag ggagtctctg
 180
 aaaacaaaca cacacagaag ttggcgctgg gcaccacatt ctctcttga cctaaccatc
 240
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 300
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<210> 5520
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 5520
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 Gln Arg Gln Leu Leu Cys Val Phe Val Phe Arg Asp Ser Leu Arg Glu
 35 40 45
 Gly Asn Ala Arg Arg Asn Met Val Ser Ser Glu Ala His Gly Cys Phe
 50 55 60
 Leu Arg Pro Ala Val Phe Tyr Ala Thr Tyr Pro Cys Thr Ser Tyr Ala
 65 70 75 80
 Lys Glu Thr Lys Pro Ser Ala Cys Leu Phe Pro Leu Leu Ile Ile Gly
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<210> 5521
 <211> 2524
 <212> DNA
 <213> Homo sapiens

<400> 5521
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<210> 5517

<211> 804

<212> DNA

<213> Homo sapiens

<400> 5517

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 180
 caaccaacac atggtgacat ggtgattgtg ccaacttggt gctcagttat atgcagggcc
 240
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 300
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 360
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<210> 5518

<211> 85

<212> PRT

<213> Homo sapiens

<400> 5518

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Glu	Leu	Ser	Ser	Val	Leu	Tyr	Cys	Cys	Asp	Leu	Leu	Ile	Gly	Ile	Gly
			20				25					30			
Ile	Val	Val	Gly	Ser	Ser	Asp	Arg	Ile	Arg	Ala	Ser	Ser	Leu	Gln	Val
		35				40					45				
Gln	Lys	Gln	Phe	Lys	Thr	Leu	Met	Ile	Ala	Leu	Gln	Gln	Pro	Thr	His
	50				55					60					
Gly	Asp	Met	Val	Ile	Val	Pro	Thr	Cys	Cys	Ser	Val	Ile	Cys	Arg	Ala
65					70					75				80	
Ser	Asp	Trp	Phe	Lys											

```

                165                170                175
Pro Cys Val Leu Gln Arg Ala Gly Pro Leu Pro Gly Lys Asp Ile Pro
                180                185                190
Leu Pro Val Thr Val Gln Arg Thr Pro Leu Asn Trp Lys Glu Leu Asp
                195                200                205
Ser Ser Leu Leu Phe Ser Glu Ala Ala Thr Gly Glu Glu Ser Leu Leu
                210                215                220
Ser Glu Gly Leu Arg Glu Ser Leu Ser Phe Tyr Ile Ser Leu Asn Asp
225                230                235                240
Glu Ala Val Ser Leu Asp Asp Ala
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<210> 5515
 <211> 420
 <212> DNA
 <213> Homo sapiens

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<400> 5515
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<210> 5516
 <211> 120
 <212> PRT
 <213> Homo sapiens

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<400> 5516
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Lys Lys Met Gln Glu Arg Met Ser Ala Gln Leu Ala Ala Glu Ser
20          25          30
Arg Gln Lys Lys Leu Glu Met Glu Lys Leu Gln Leu Gln Ala Leu Glu
35          40          45
Gln Glu His Lys Lys Leu Ala Ala Arg Leu Glu Glu Glu Arg Gly Lys
50          55          60
Asn Lys Gln Val Val Leu Met Leu Val Lys Glu Cys Lys Gln Leu Ser
65          70          75          80
Ser Lys Val Ile Glu Glu Ala Gln Lys Leu Glu Asp Val Met Ala Lys
85          90          95
Leu Ala Ser Ser Leu Cys His Gln His Leu Leu His Ser Leu Ser Gly
100         105         110
Val Pro Gly Thr Gly His Ile Asp

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<210> 5514

<211> 248

<212> PRT

<213> Homo sapiens

<400> 5514

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Ala	Glu	Arg	Ser	Lys	Ala	Thr	Ala	Ala	Ala	Leu	Gly	Ser	Phe	Pro	Ala
		20						25					30		
Gly	Gly	Pro	Ala	Glu	Leu	Ser	Leu	Arg	Leu	Gly	Glu	Pro	Leu	Thr	Ile
		35					40					45			
Val	Ser	Glu	Asp	Gly	Asp	Trp	Trp	Thr	Val	Leu	Ser	Glu	Val	Ser	Gly
		50				55					60				
Arg	Glu	Tyr	Asn	Ile	Pro	Ser	Val	His	Val	Ala	Lys	Val	Ser	His	Gly
65					70					75				80	
Trp	Leu	Tyr	Glu	Gly	Leu	Ser	Arg	Glu	Lys	Ala	Glu	Asp	Leu	Leu	Leu
				85					90					95	
Leu	Pro	Gly	Asn	Pro	Gly	Gly	Ala	Phe	Leu	Ile	Arg	Glu	Ser	Gln	Thr
		100						105					110		
Arg	Arg	Gly	Ser	Tyr	Ser	Leu	Ser	Val	Arg	Leu	Ser	Arg	Pro	Ala	Ser
		115					120					125			
Trp	Asp	Arg	Ile	Arg	His	Tyr	Arg	Ile	His	Cys	Leu	Asp	Asn	Gly	Trp
		130				135					140				
Leu	Tyr	Ile	Ser	Pro	Arg	Leu	Thr	Phe	Pro	Ser	Leu	Gln	Ala	Leu	Val
145					150					155				160	
Asp	His	Tyr	Ser	Glu	Leu	Ala	Asp	Asp	Ile	Cys	Cys	Leu	Leu	Lys	Glu

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 His Ser Gly Glu Asn Leu Tyr Glu Cys
 100 105

<210> 5511
 <211> 379
 <212> DNA
 <213> Homo sapiens

<400> 5511
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<210> 5512
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 5512
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 Ile Glu Glu Phe Ser Ile Ile Pro Glu Ala Pro Met Arg Ser Ser Gln
 20 25 30
 Val Ser Ala Leu Gly Leu Glu Ala Gln Glu Asp Glu Asp Pro Ser Tyr
 35 40 45
 Lys Trp Arg Glu Glu His Arg Leu Ser Ala Thr Gln Gln Ser Glu Leu
 50 55 60
 Arg Asp Val Cys Asp Tyr Ala Ile Glu Thr Met Pro Ser Phe Pro Lys
 65 70 75 80
 Glu Gly Ser Ala Asp Val Glu Pro Asn Gln Glu Ser Leu Val Ala Glu
 85 90 95
 Ala Cys Asp Thr Pro
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<210> 5513
 <211> 837
 <212> DNA
 <213> Homo sapiens

<400> 5513
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435

440

445

<210> 5509

<211> 818

<212> DNA

<213> Homo sapiens

<400> 5509

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<210> 5510

<211> 105

<212> PRT

<213> Homo sapiens

<400> 5510

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Ala	Phe	Ser	Gln	Ile	Pro	Gly	His	Asn	Leu	Asn	Lys	Lys	Thr	Pro	Pro
			20					25					30		
Gly	Val	Lys	Pro	Pro	Glu	Ser	His	Val	Cys	Gly	Glu	Val	Gly	Val	Gly
		35					40					45			
Tyr	Pro	Ser	Thr	Glu	Arg	His	Ile	Arg	Asp	Arg	Leu	Gly	Arg	Lys	Pro
		50				55					60				
Cys	Glu	Tyr	Gln	Glu	Cys	Arg	Gln	Lys	Ala	Tyr	Thr	Cys	Lys	Pro	Cys
65					70					75				80	
Gly	Asn	Ala	Phe	Arg	Phe	His	His	Ser	Phe	His	Ile	His	Glu	Arg	Pro

1	5	10	15
Leu Asp Pro Tyr Thr Glu Leu Arg Lys Gln Pro Leu Arg Lys Tyr Val			
20	25	30	
Thr Pro Ser Asp Phe Asp Gln Leu Lys Gln Phe Leu Thr Phe Asp Lys			
35	40	45	
Gln Val Leu Arg Phe Tyr Ala Ile Trp Asp Asp Thr Asp Ser Met Tyr			
50	55	60	
Gly Glu Cys Arg Thr Tyr Ile Ile His Tyr Tyr Leu Met Asp Asp Thr			
65	70	75	80
Val Glu Ile Arg Glu Val His Glu Arg Asn Asp Gly Arg Asp Pro Phe			
85	90	95	
Pro Leu Leu Met Asn Arg Gln Arg Val Pro Lys Val Leu Val Glu Asn			
100	105	110	
Ala Lys Asn Phe Pro Gln Cys Val Leu Glu Ile Ser Asp Gln Glu Val			
115	120	125	
Leu Glu Trp Tyr Thr Ala Lys Asp Phe Ile Val Gly Lys Ser Leu Thr			
130	135	140	
Ile Leu Gly Arg Thr Phe Phe Ile Tyr Asp Cys Asp Pro Phe Thr Arg			
145	150	155	160
Arg Tyr Tyr Lys Glu Lys Phe Gly Ile Thr Asp Leu Pro Arg Ile Asp			
165	170	175	
Val Ser Lys Arg Glu Pro Pro Pro Val Lys Gln Glu Leu Pro Pro Tyr			
180	185	190	
Asn Gly Phe Gly Leu Val Glu Asp Ser Ala Gln Asn Cys Phe Ala Leu			
195	200	205	
Ile Pro Lys Ala Pro Lys Lys Asp Val Ile Lys Met Leu Val Asn Asp			
210	215	220	
Asn Lys Val Leu Arg Tyr Leu Ala Val Leu Glu Ser Pro Ile Pro Glu			
225	230	235	240
Asp Lys Asp Arg Arg Phe Val Phe Ser Tyr Phe Leu Ala Thr Asp Met			
245	250	255	
Ile Ser Ile Phe Glu Pro Pro Val Arg Asn Ser Gly Ile Ile Gly Gly			
260	265	270	
Lys Tyr Leu Gly Arg Thr Lys Val Val Lys Pro Tyr Ser Thr Val Asp			
275	280	285	
Asn Pro Val Tyr Tyr Gly Pro Ser Asp Phe Phe Ile Gly Ala Val Ile			
290	295	300	
Glu Val Phe Gly His Arg Phe Ile Ile Leu Asp Thr Asp Glu Tyr Val			
305	310	315	320
Leu Lys Tyr Met Glu Ser Asn Ala Ala Gln Tyr Ser Pro Glu Ala Leu			
325	330	335	
Ala Ser Ile Gln Asn His Val Arg Lys Arg Glu Ala Pro Ala Pro Glu			
340	345	350	
Ala Glu Ser Lys Gln Thr Glu Lys Asp Pro Gly Val Gln Glu Leu Glu			
355	360	365	
Ala Leu Ile Asp Thr Ile Gln Lys Gln Leu Lys Asp His Ser Cys Lys			
370	375	380	
Asp Asn Ile Arg Glu Ala Phe Gln Ile Tyr Asp Lys Glu Ala Ser Gly			
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Tyr Val Asp Arg Asp Met Phe Phe Lys Ile Cys Glu Ser Leu Asn Val			
405	410	415	
Pro Val Asp Asp Ser Leu Val Lys Glu Leu Ile Arg Met Cys Ser His			
420	425	430	
Gly Glu Gly Lys Ile Asn Tyr Tyr Asn Phe Val Arg Ala Phe Ser Asn			

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1658

<210> 5508

<211> 448

<212> PRT

<213> Homo sapiens

<400> 5508

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<400> 5506

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 Phe Ile Thr Glu Asp Trp Asp Gln Pro Val Ala Asp Trp Lys Ile Phe
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 Glu Glu Gly Phe Glu Phe Trp Ser Leu Asp Val Asn Gly Gly Asp Glu
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 Gln Lys Ser Asp Ala Lys Trp Arg Glu Val Ser His Thr Phe Ser Asn
 225 230 235 240
 Tyr Pro Pro Gly Val Arg Tyr Ile Trp Phe Gln His Gly Gly Val Asp
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<210> 5507

<211> 1658

<212> DNA

<213> Homo sapiens

<400> 5507

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<210> 5505
 <211> 1099
 <212> DNA
 <213> Homo sapiens

<400> 5505
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<210> 5506
 <211> 280
 <212> PRT
 <213> Homo sapiens

<210> 5504
 <211> 392
 <212> PRT
 <213> Homo sapiens

<400> 5504

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Arg Ser Arg Ala Pro His Lys Asp Arg Thr Leu Ala Arg Ser Arg Pro
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Gln Thr Gln Gly Glu Asp Cys Ser Leu Pro Val Gly Glu Val Lys Ile
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 115          120          125
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 130          135          140
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 145          150          155          160
Asp His Lys Gln Gly Pro Pro Glu Val Thr Cys Gln Ile Arg Lys Lys
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Thr Arg Thr Leu Tyr Arg Ser Asp Gln Leu Glu Glu Leu Glu Lys Ile
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Phe Gln Glu Asp His Tyr Pro Asp Ser Asp Lys Arg Arg Glu Ile Ala
 195          200          205
Gln Thr Val Gly Val Thr Pro Gln Arg Ile Met Val Lys Gly Ala Gly
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Ser Leu Val Ala Gly Trp Ser Gly Gly Gly Pro Thr Ile Glu Thr Leu
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 260          265          270
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<212> DNA

<213> Homo sapiens

<400> 5501

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<210> 5502

<211> 110

<212> PRT

<213> Homo sapiens

<400> 5502

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Phe	Val	Thr	Thr	Lys	Gly	Thr	Val	Leu	Phe	Thr	Ala	Pro	Pro	Ala	Ser
	50					55				60					
Ala	Trp	Gln	Leu	Cys	Leu	Pro	Val	Leu	Tyr	Leu	Ile	Pro	Pro	Ala	Lys
65				70					75					80	
Leu	Ala	Arg	Gln	Gly	Pro	Ala	Leu	Lys	Glu	Ile	Ser	Leu	Pro	Asp	Pro
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Trp	Thr	Trp	Lys	Trp	Arg	Leu	His	Val	Pro	Ala	Leu	Ala	Ala		
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<210> 5503

<211> 1679

<212> DNA

<213> Homo sapiens

<400> 5503

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 Asp Ile Ala His Asn Ser Asp Cys Glu Pro Lys Ser Lys Leu Leu Arg
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 Thr Arg Gln His Gly Asp Asp Ala Ser Glu Glu Lys Ala Ala Asn Gln
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 Cys Gly Met Gln Val Tyr Gln Ala Gly Ser Gly Gln Leu Met Phe Met
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 Asn Lys Tyr His Gly Arg Lys Leu Ser Val Gln Gly Phe Lys Glu Ala
 275 280 285
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 325 330 335
 Gly Lys Glu Arg Pro Glu Val Val Leu Asp Ser Asp Ala Glu Asp Leu
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 Tyr Lys Pro Ile Gly Ala Ser Ser Val Asp Val Arg Met Ile Asp Phe
 370 375 380
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<210> 5501

<211> 568

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 1918

<210> 5500

<211> 426

<212> PRT

<213> Homo sapiens

<400> 5500

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<210> 5498
 <211> 150
 <212> PRT
 <213> Homo sapiens

<400> 5498
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 Asn Ile Pro His Thr Leu Thr Glu Pro His Ser Val Pro Gly Trp Cys
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<210> 5499
 <211> 1918
 <212> DNA
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<210> 5497

<211> 1056

<212> DNA

<213> Homo sapiens

<400> 5497

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<211> 602

<212> PRT

<213> Homo sapiens

<400> 5492

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<211> 272

<212> PRT

<213> Homo sapiens

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			20					25					30		
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<213> Homo sapiens

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<210> 5484

<211> 357

<212> PRT

<213> Homo sapiens

<400> 5484

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<210> 5483

<211> 1552

<212> DNA

<213> Homo sapiens

<400> 5483

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1140

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<211> 188

<212> PRT

<213> Homo sapiens

<400> 5482

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 Phe Lys Leu Asp Phe Gly Asn Ser Gln Gly Lys Thr Ser Gln Thr Trp
 50 55 60
 His Gly Gly Ile Ala Thr Ile Phe Gln Ser Pro Gly Asp Glu Leu Trp
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 Gly Val Val Trp Lys Met Asn Lys Ser Asn Leu Asn Ser Leu Asp Glu
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 Gln Glu Gly Val Lys Ser Gly Met Tyr Val Val Ile Glu Val Lys Val
 100 105 110
 Ala Thr Gln Glu Gly Lys Glu Ile Thr Cys Arg Ser Tyr Leu Met Thr

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 Glu Gln Glu Ala Arg Glu Lys Ala Gln Ala Glu Gln Glu Glu Gln Glu
 65 70 75 80
 Arg Leu Gln Lys Gln Lys Glu Glu Ala Glu Ala Arg Ser Arg Glu Glu
 85 90 95
 Ala Glu Arg Gln Arg Leu Glu Arg Glu Lys His Phe Gln Gln Gln Glu
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 Gln Glu Arg Gln Glu Arg Arg Lys Arg Leu Glu Glu Ile Met Lys Arg
 115 120 125
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 180 185 190
 Ser Leu Val Asn Gly Leu Gln Pro Leu Pro Ala His Gln Glu Asn Gly
 195 200 205
 Phe Ser Thr Asn Gly Pro Ser Gly Asp Lys Ser Leu Ser Arg Thr Pro
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<210> 5481
 <211> 1513
 <212> DNA
 <213> Homo sapiens

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<211> 251

<212> PRT

<213> Homo sapiens

<400> 5480

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		20					25						30		
Leu	Gln	Ala	Glu	Arg	Asp	Lys	Arg	Met	Arg	Glu	Glu	Gln	Leu	Ala	Arg

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<210> 5478
 <211> 99
 <212> PRT
 <213> Homo sapiens

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 Ala Pro Gly Gln Arg Gly Arg Lys Arg Trp Leu Leu Val Arg Leu Tyr
 35 40 45
 Lys Thr Trp Pro Leu Thr Cys Arg Pro Pro Thr Gln Leu Ala Gly Trp
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 Ala Gly Leu Ser Pro Leu Ala Ser Pro Gly Pro Leu Ala Gly Ser Ser
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 <211> 1386
 <212> DNA
 <213> Homo sapiens

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 180

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<210> 5476

<211> 209

<212> PRT

<213> Homo sapiens

<400> 5476

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			20					25					30		
Asn	Glu	Gly	Leu	Trp	Glu	Ile	Gln	Asn	Asn	Pro	His	Ala	Ser	Tyr	Ser
		35					40					45			
Ala	Pro	Pro	Pro	Val	Ser	Ser	Ser	Asp	Ser	Glu	Ala	Pro	Glu	Ala	Asn
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Pro	Ala	Asp	Gly	Ser	Asp	Ala	Asp	Glu	Asp	Asp	Glu	Asp	Arg	Gly	Val
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Met	Ala	Val	Thr	Ala	Val	Thr	Ala	Thr	Ala	Ala	Ser	Asp	Arg	Met	Glu
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Ser	Asp	Ser	Asp	Ser	Asp	Lys	Ser	Ser	Asp	Asn	Ser	Gly	Leu	Lys	Arg
			100					105					110		
Lys	Thr	Pro	Ala	Leu	Lys	Met	Ser	Val	Ser	Lys	Arg	Ala	Arg	Lys	Ala
		115					120						125		
Ser	Ser	Asp	Leu	Asp	Gln	Ala	Ser	Val	Ser	Pro	Ser	Glu	Glu	Glu	Asn
		130				135						140			
Ser	Glu	Ser	Ser	Ser	Glu	Ser	Glu	Lys	Thr	Ser	Asp	Gln	Asp	Phe	Thr
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Pro	Glu	Lys	Lys	Ala	Ala	Val	Arg	Ala	Pro	Arg	Arg	Gly	Pro	Leu	Gly
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Gly	Arg	Lys	Lys	Lys	Lys	Ala	Pro	Ser	Ala	Ser	Asp	Ser	Asp	Ser	Lys
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<210> 5477

<211> 727

<212> DNA

<213> Homo sapiens

<400> 5477

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<210> 5474

<211> 139

<212> PRT

<213> Homo sapiens

<400> 5474

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			20				25						30		
Ser	Pro	Ser	Pro	Gly	Ile	Arg	Ser	Ile	Met	Ser	Ser	Ala	Ile	Ala	Tyr
		35				40					45				
Leu	Cys	Gly	His	Leu	His	Thr	Leu	Gly	Gly	Leu	Met	Pro	Val	Leu	His
	50				55				60						
Thr	Arg	His	Phe	Gln	Gly	Thr	Leu	Glu	Leu	Glu	Val	Gly	Asp	Trp	Lys
65				70				75						80	
Asp	Asn	Arg	Arg	Tyr	Arg	Ile	Phe	Ala	Phe	Asp	His	Asp	Leu	Phe	Ser
			85				90							95	
Phe	Ala	Asp	Leu	Ile	Phe	Gly	Lys	Trp	Pro	Val	Val	Leu	Ile	Thr	Asn
			100				105						110		
Pro	Lys	Ser	Leu	Leu	Tyr	Ser	Cys	Gly	Glu	His	Glu	Pro	Leu	Glu	Arg
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<210> 5475

<211> 628

<212> DNA

<213> Homo sapiens

<400> 5475

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<210> 5472
 <211> 161
 <212> PRT
 <213> Homo sapiens

<400> 5472
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 35 40 45
 Phe Leu Cys Leu Cys Thr His Ala Gly Ala Gly Gly Ser Val His Thr
 50 55 60
 Pro Pro Arg Leu Arg Ala Arg Pro Tyr Met Pro Cys Ala Pro Thr Gln
 65 70 75 80
 Ala Gly Leu Gly Ser Leu His Ser Pro Leu Arg Val His Ser His Ile
 85 90 95
 Ala Thr His Ser Cys Pro His Lys Leu Val Ser Leu Tyr Ser Ala His
 100 105 110
 Gly His Thr Cys Ala Pro His Leu Ala Thr Arg Thr Pro Gly Leu Cys
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 Ile Pro His Pro Gly Ser Gly Pro Arg Val Val Gly Pro Ala Gly Ser
 130 135 140
 Ala Ala Ala Ser Ala Arg Thr Val Leu Phe Leu Arg Pro Arg Gly Ala
 145 150 155 160
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<210> 5473
 <211> 691
 <212> DNA
 <213> Homo sapiens

<400> 5473
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 540

195 200 205
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 210 215 220
 Trp Glu Glu Glu Glu Glu Glu Leu Met Gly Ile Ser Pro Ile Ser Pro
 225 230 235 240
 Lys Glu Ala Lys Val Pro Val Ala Lys Ile Ser Thr Phe Pro Glu Gly
 245 250 255
 Glu Pro Gly Pro Gln Ser Pro Cys Glu Glu Asn Leu Val Thr Ser Val
 260 265 270
 Glu Pro Pro Ala Glu Val Thr Pro Ser Glu Ser Ser Glu Ser Ile Ser
 275 280 285
 Leu Val Thr Gln Ile Ala Asn Pro Ala Thr Ala Pro Glu Ala Arg Val
 290 295 300
 Leu Pro Lys Asp Leu Ser Gln Lys Leu Leu Glu Ala Ser Leu Glu Glu
 305 310 315 320
 Gln Gly Leu Ala Val Asp Val Gly Glu Thr Gly Pro Ser Pro Ile
 325 330 335
 His Ser Lys Pro Leu Thr Pro Ala Gly His Thr Gly Gly Pro Glu Pro
 340 345 350
 Arg Pro Pro Ala Arg Val Glu Thr Leu Arg Glu Glu Ala Pro Thr Asp
 355 360 365
 Leu Arg Val Phe Glu Leu Asn Ser Asp Ser Gly Lys Ser Thr Pro Ser
 370 375 380
 Asn Asn Gly Lys Lys Gly Ser Ser Thr Asp Ile Ser Glu Asp Trp Glu
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<210> 5471

<211> 534

<212> DNA

<213> Homo sapiens

<400> 5471

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 780
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 840
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 1020
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 1200
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 1260
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 1292

<210> 5470

<211> 427

<212> PRT

<213> Homo sapiens

<400> 5470

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Trp	Leu	Gln	Gln	Ser	Tyr	Gln	Ala	Val	Lys	Glu	Lys	Ser	Ser	Glu	Ala
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Leu	Glu	Phe	Met	Lys	Arg	Asp	Leu	Thr	Glu	Phe	Thr	Gln	Val	Val	Gln
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His	Asp	Thr	Ala	Cys	Thr	Ile	Ala	Ala	Thr	Ala	Ser	Val	Val	Lys	Glu
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Lys	Leu	Ala	Thr	Glu	Gly	Ser	Ser	Gly	Ala	Thr	Glu	Lys	Met	Lys	Lys
	65				70				75					80	
Gly	Leu	Ser	Asp	Phe	Leu	Gly	Val	Ile	Ser	Asp	Thr	Phe	Ala	Pro	Ser
			85						90					95	
Pro	Asp	Lys	Thr	Ile	Asp	Cys	Asp	Val	Ile	Thr	Leu	Met	Gly	Thr	Pro
		100						105					110		
Ser	Gly	Thr	Ala	Glu	Pro	Tyr	Asp	Gly	Thr	Lys	Ala	Arg	Leu	Tyr	Ser
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Glu	Leu	Phe	Asp	Ala	Trp	Leu	Ser	Gln	Phe	Cys	Leu	Glu	Glu	Lys	Lys
	145				150				155					160	
Gly	Glu	Ile	Ser	Glu	Leu	Leu	Val	Gly	Ser	Pro	Ser	Ile	Arg	Ala	Leu
		165						170					175		
Tyr	Thr	Lys	Met	Val	Pro	Ala	Ala	Val	Ser	His	Ser	Glu	Phe	Trp	His
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<210> 5469
<211> 1292
<212> DNA
<213> Homo sapiens
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120
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180
gtggtcaagg agaagctggc tacggaaggc tcctcaggag caacagagaa gatgaagaaa
240
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300
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360
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420
gatgggcccc cggaattggt tgacgcctgg ctttcccagt tctgcttgga ggagaagaag
480
ggggagatct cagagctcct tgtaggcagc ccctccatcc ggccctcta caccaagatg
540
gttccagcag ctgtttccca ttcagaattc tggcatcggg atttctataa agtccatcag
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ttagagcagg agcaggcccg gagggacgcc ctgaagcagc gggcggaaca gagcatctct
660

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ggagagatga ctcagctgcc agtgatcaaa gcagagcctc tggaggtgaa ccagttcctc
 660
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 720
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 780
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 840
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 960
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 1020
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 1080
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<210> 5468

<211> 363

<212> PRT

<213> Homo sapiens

<400> 5468

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Ser	Ser	Phe	Leu	Asp	Leu	Gly	Asp	Leu	Asn	Glu	Ser	Asp	Phe	Leu	Asn
			20					25					30		
Asn	Ala	His	Phe	Pro	Glu	His	Leu	Asp	His	Phe	Thr	Glu	Asn	Met	Glu
			35				40					45			
Asp	Phe	Ser	Asn	Asp	Leu	Phe	Ser	Ser	Phe	Phe	Asp	Asp	Pro	Val	Leu
			50				55					60			
Asp	Glu	Lys	Ser	Pro	Leu	Leu	Asp	Met	Glu	Leu	Asp	Ser	Pro	Thr	Pro
65					70				75					80	
Gly	Ile	Gln	Ala	Glu	His	Ser	Tyr	Ser	Leu	Ser	Gly	Asp	Ser	Ala	Pro
			85					90						95	
Gln	Ser	Pro	Leu	Val	Pro	Ile	Lys	Met	Glu	Asp	Thr	Thr	Gln	Asp	Ala
			100					105					110		
Glu	His	Gly	Ala	Trp	Ala	Leu	Gly	His	Lys	Leu	Cys	Ser	Ile	Met	Val
			115				120					125			
Lys	Gln	Glu	Gln	Ser	Pro	Glu	Leu	Pro	Val	Asp	Pro	Leu	Ala	Ala	Pro
			130				135					140			
Ser	Ala	Met	Ala	Ala	Ala	Ala	Ala	Met	Ala	Thr	Thr	Pro	Leu	Leu	Gly
145					150				155					160	
Leu	Ser	Pro	Leu	Ser	Arg	Leu	Pro	Ile	Pro	His	Gln	Ala	Pro	Gly	Glu

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497

<210> 5466
<211> 134
<212> PRT
<213> Homo sapiens

<400> 5466
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Val Arg Asp Glu Pro Pro Ala Lys Pro Val Gly Met Ser Gly Pro Ser
35 40 45
Trp Trp Asp Cys Leu Gly His Arg His Gln His Gly Val Arg Ala Ile
50 55 60
Ser Gly Asp Ile Gly Gly Ala Thr Thr Arg Trp Gly Ile Phe Asn Arg
65 70 75 80
Leu Glu Pro Leu Arg Leu Glu Arg Pro Thr Pro Gly Arg Arg Pro Pro
85 90 95
Leu Thr Pro Leu Leu Pro Leu Leu Trp Asp Pro Pro Val Asp Thr Pro
100 105 110
Asp Glu Asp Thr Gln Glu Ala Ser Ser Gln Asp Arg Arg Gln Leu Pro
115 120 125
Gly Gln Pro Arg Ser Ala
130

<210> 5467
<211> 1329
<212> DNA
<213> Homo sapiens

<400> 5467
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420
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540
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600

gtgaagcagc gcttgcagat gtacaactcg cagcaccggt cagcaatcag ctgcatccgg
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 660
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 720
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 780
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 792

<210> 5464
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 5464
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 20 25 30
 Gln Met Tyr Asn Ser Gln His Arg Ser Ala Ile Ser Cys Ile Arg Thr
 35 40 45
 Val Trp Arg Thr Glu Gly Leu Gly Ala Phe Tyr Arg Ser Tyr Thr Thr
 50 55 60
 Gln Leu Thr Met Asn Ile Pro Phe Gln Ser Ile His Phe Ile Thr Tyr
 65 70 75 80
 Glu Phe Leu Gln Glu Gln Val Asn Pro His Arg Thr Tyr Asn Pro Gln
 85 90 95
 Ser His Ile Ile Ser Gly Gly Leu Ala Gly Ala Leu Ala Ala Ala
 100 105 110

<210> 5465
 <211> 497
 <212> DNA
 <213> Homo sapiens

<400> 5465
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 420
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<210> 5462
<211> 159
<212> PRT
<213> Homo sapiens

<400> 5462
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35 40 45
Ala Gln Arg Gly Cys Gln Leu Leu Val Tyr Pro Gly Ala Phe Asn Leu
50 55 60
Thr Thr Gly Pro Ala His Trp Glu Leu Leu Gln Arg Ser Arg Ala Val
65 70 75 80
Asp Asn Gln Val Tyr Val Ala Thr Ala Ser Pro Ala Arg Asp Asp Lys
85 90 95
Ala Ser Tyr Val Ala Trp Gly His Ser Thr Val Val Asn Pro Trp Gly
100 105 110
Glu Val Leu Ala Lys Ala Gly Thr Glu Glu Ala Ile Val Tyr Ser Asp
115 120 125
Ile Asp Leu Lys Lys Leu Ala Glu Ile Arg Gln Gln Ile Pro Val Phe
130 135 140
Arg Gln Lys Arg Ser Asp Leu Tyr Ala Val Glu Met Lys Lys Pro
145 150 155

<210> 5463
<211> 792
<212> DNA
<213> Homo sapiens

<400> 5463
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120
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<210> 5460

<211> 155

<212> PRT

<213> Homo sapiens

<400> 5460

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			20					25					30		
Ser	Glu	Asp	Tyr	Glu	Asn	Leu	Pro	Thr	Ser	Ala	Ser	Val	Ser	Thr	His
		35					40					45			
Met	Thr	Ala	Gly	Ala	Met	Ala	Gly	Ile	Leu	Glu	His	Ser	Val	Met	Tyr
	50					55					60				
Pro	Val	Asp	Ser	Val	Lys	Thr	Arg	Met	Gln	Ser	Leu	Ser	Pro	Asp	Pro
65					70				75					80	
Lys	Ala	Gln	Tyr	Thr	Ser	Ile	Tyr	Gly	Ala	Leu	Lys	Lys	Ile	Met	Gln
			85					90						95	
Thr	Glu	Gly	Phe	Trp	Arg	Pro	Leu	Arg	Gly	Val	Asn	Val	Met	Ile	Met
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Gly	Ala	Gly	Pro	Ala	His	Ala	Met	Tyr	Phe	Ala	Cys	Tyr	Glu	Asn	Met
		115					120					125			
Lys	Arg	Thr	Leu	Asn	Asp	Val	Phe	His	His	Gln	Gly	Asn	Ser	His	Leu
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<210> 5461

<211> 1725

<212> DNA

<213> Homo sapiens

<400> 5461

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<213> Homo sapiens

<400> 5458

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      20             25             30
Tyr Glu Asn Leu Pro Thr Ser Ala Ser Val Ser Thr His Met Thr Ala
      35             40             45
Gly Ala Met Ala Gly Ile Leu Glu His Ser Val Met Tyr Pro Val Asp
      50             55             60
Ser Val Lys Val Met Trp Thr Val Glu Leu Cys Ala Gly His Phe Gln
65             70             75             80
Pro

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<210> 5459

<211> 1468

<212> DNA

<213> Homo sapiens

<400> 5459

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<210> 5456
 <211> 149
 <212> PRT
 <213> Homo sapiens

<400> 5456
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 Val Val Lys Gln Arg Leu Gln Met Tyr Asn Ser Gln His Arg Ser Ala
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 85 90 95
 Tyr Arg Ser Tyr Thr Thr Gln Leu Thr Met Asn Ile Pro Phe Gln Ser
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 Ile His Phe Ile Thr Tyr Glu Phe Leu Gln Glu Gln Val Asn Pro His
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<210> 5457
 <211> 448
 <212> DNA
 <213> Homo sapiens

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 <211> 81
 <212> PRT

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	245	250
Gln Leu Val Gln Ala Leu Arg Ala Thr Pro Asp Pro Asp Pro Glu Asp		255
	260	265
Arg Gly Pro Arg Pro Gly Ser Pro Ser Ala Leu Leu Pro Gly Pro Gly		270
	275	280
Arg Pro Pro Pro Pro Pro Thr Lys Pro Pro Glu Thr Glu Ala Gln Arg		285
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<211> 975

<212> DNA

<213> Homo sapiens

<400> 5455

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 1974

<210> 5454
 <211> 320
 <212> PRT
 <213> Homo sapiens

<400> 5454
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 35 40 45
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 85 90 95
 Glu Arg Arg Val Thr Lys Ala Tyr Leu Ala Leu Leu Arg Gly His Ile
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 Gln Glu Ser Arg Val Thr Ile Ser His Ala Ile Gly Arg Asn Ser Thr
 115 120 125
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 Leu Thr Gly Arg Thr His Gln Leu Arg Val His Cys Ser Ala Leu Gly
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<210> 5453

<211> 1974

<212> DNA

<213> Homo sapiens

<400> 5453

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<210> 5452

<211> 206

<212> PRT

<213> Homo sapiens

<400> 5452

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 35 40 45
 Leu Ser Pro Ala Leu Ser Gln Thr Thr Gln Lys Ser Gly His Leu Trp
 50 55 60
 Ala Pro Gly Met Val Thr Glu Glu Lys His Ala Val Pro Val Ser Pro
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 Gly Phe Cys Gln Lys Ile Glu Gln Val Gln Leu Thr His Cys Tyr Cys
 85 90 95
 Arg Ser Leu Lys Leu Pro Gly Leu Val Leu Asp Pro Ser Arg Asn His
 100 105 110
 Gln Val Arg His Leu Glu Pro Pro Gly Glu Gly Pro Pro Ser Arg Ala
 115 120 125
 Leu Lys Glu Leu His Glu Ile Arg Asn Cys Leu Met Lys Cys Ile Ser
 130 135 140
 Leu Tyr Leu Glu Asp Glu Ala Gln Thr Pro Thr Pro Leu Ser Pro Pro
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 Gly Leu Gly Met Ser Pro Ala Ala Arg Pro Arg Ser Phe Pro Gly Gly
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 180 185 190
 Pro Ser Thr Ser Glu Thr Thr Leu Pro Gln Pro Asp Thr Glu

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Gly	Thr	Leu	Ser	Met	Leu	Gln	Cys	Asn	Val	Phe	Pro	Gly	Leu	Pro	Pro
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Asp	Phe	Leu	Asp	Ser	Glu	Val	Asn	Leu	Phe	Leu	Val	Pro	Phe	Met	Asp
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<210> 5451
 <211> 1184
 <212> DNA
 <213> Homo sapiens

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<210> 5450

<211> 293

<212> PRT

<213> Homo sapiens

<400> 5450

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			20					25					30		
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		50				55					60				
Glu	Tyr	Asn	Leu	Pro	His	Thr	Tyr	Val	Glu	Met	Gln	Ser	Leu	Gln	Ile

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<210> 5448
 <211> 189
 <212> PRT
 <213> Homo sapiens

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 Val Thr Asp Val Phe Gln Gly Ser Met Arg Ile Phe Thr Lys Lys Leu
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 Pro His Pro Asp Leu Pro Ala Glu Glu Lys Glu Gln Leu Leu His Asn
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 Asp Glu Tyr Gln Glu Thr Met Val Glu Ser Thr Phe Met Tyr Leu Thr
 85 90 95
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 Ile Ile Pro Gln Val Pro Leu Phe Asn Ile Leu Ala Lys Phe Asn Gly
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 130 135 140
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<210> 5449
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 <212> DNA
 <213> Homo sapiens

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Thr	Val	Glu	Thr	Arg	Gln	Val	Gly	Leu	Gly	Cys					
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<210> 5447

<211> 1444

<212> DNA

<213> Homo sapiens

<400> 5447

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1260

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<211> 107

<212> PRT

<213> Homo sapiens

<400> 5446

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			20					25					30		
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<211> 438

<212> PRT

<213> Homo sapiens

<400> 5444

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			20				25						30		
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Arg	Ala	Trp	Gln	Tyr	Leu	Ser	Gly	Gly	Lys	Val	Lys	Leu	Gln	Gln	Asn
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Leu	Asp	Val	Ile	Glu	Arg	Asp	Leu	His	Arg	Gln	Phe	Pro	Phe	His	Glu

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	180	185
Leu Ile Lys Val Ile Glu Ser Glu Asp Tyr Gly Gln Gln Leu Glu Ile		
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<210> 5443

<211> 2021

<212> DNA

<213> Homo sapiens

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<211> 250

<212> PRT

<213> Homo sapiens

<400> 5442

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			20					25					30		
Lys	Asn	Lys	Val	Val	Gly	Trp	Arg	Ser	Gly	Val	Glu	Lys	Asp	Leu	Asp
		35					40					45			
Glu	Val	Leu	Gln	Thr	His	Ser	Val	Phe	Val	Asn	Val	Ser	Lys	Gly	Gln
		50				55					60				
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65					70					75					80
Thr	Glu	Ile	Cys	Lys	Gln	Ile	Leu	Thr	Lys	Gly	Glu	Val	Gln	Val	Ser
			85						90					95	
Asp	Lys	Glu	Arg	His	Thr	Gln	Leu	Glu	Gln	Met	Phe	Arg	Asp	Ile	Ala
			100						105				110		
Thr	Ile	Val	Ala	Asp	Lys	Cys	Val	Asn	Pro	Glu	Thr	Lys	Arg	Pro	Tyr
		115						120					125		
Thr	Val	Ile	Leu	Ile	Glu	Arg	Ala	Met	Lys	Asp	Ile	His	Tyr	Ser	Val

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 Met Tyr Lys Gly Gly Lys Ala Asp Gln Gln Glu Glu Arg Arg Arg Gln
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 Lys Gln Met Lys Val Leu Lys Lys Glu Leu Arg His Leu Leu Ser Gln
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 Pro Leu Phe Thr Glu Ser Gln Lys Thr Lys Tyr Pro Thr Gln Ser Gly
 405 410 415
 Lys Pro Pro Leu Leu Val Ser Ala Pro Ser Lys Ser Glu Ser Ala Leu
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<211> 1635

<212> DNA

<213> Homo sapiens

<400> 5441

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<212> PRT

<213> Homo sapiens

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			20					25					30		
Gln	Arg	Met	Leu	Asn	Arg	Arg	Pro	Glu	Ile	Val	Val	Ala	Thr	Pro	Gly
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	50					55					60				
Arg	Gln	Leu	Arg	Cys	Leu	Val	Val	Asp	Glu	Ala	Asp	Arg	Met	Val	Glu
65					70					75				80	
Lys	Gly	His	Phe	Ala	Glu	Leu	Ser	Gln	Leu	Leu	Glu	Met	Leu	Asn	Asp
			85					90						95	
Ser	Gln	Tyr	Asn	Pro	Lys	Arg	Gln	Thr	Leu	Val	Phe	Ser	Ala	Thr	Leu
			100					105					110		
Thr	Leu	Val	His	Gln	Ala	Pro	Ala	Arg	Ile	Leu	His	Lys	Lys	His	Thr
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Lys	Lys	Met	Asp	Lys	Thr	Ala	Lys	Leu	Asp	Leu	Leu	Met	Gln	Lys	Ile
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Gly	Met	Arg	Gly	Lys	Pro	Lys	Val	Ile	Asp	Leu	Thr	Arg	Asn	Glu	Ala
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			165					170						175	
Lys	Asp	Phe	Tyr	Leu	Tyr	Tyr	Phe	Leu	Met	Gln	Tyr	Pro	Gly	Arg	Ser
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Gln	Lys	Gln	Arg	Leu	Arg	Asn	Leu	Glu	Gln	Phe	Ala	Arg	Leu	Glu	Asp
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Cys	Val	Leu	Leu	Ala	Thr	Asp	Val	Ala	Ala	Arg	Gly	Leu	Asp	Ile	Pro
			245					250						255	
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		260					265						270		
Tyr	Val	His	Arg	Ser	Gly	Arg	Thr	Ala	Arg	Ala	Thr	Asn	Glu	Gly	Leu
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Ser	Leu	Met	Leu	Ile	Gly	Pro	Glu	Asp	Val	Ile	Asn	Phe	Lys	Lys	Ile

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720

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 1422

<210> 5438

<211> 245

<212> PRT

<213> Homo sapiens

<400> 5438

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 20 25 30
 Leu Gln Val Val Arg Glu Gly Lys Phe Ser Gly Phe Leu Thr Ser Cys
 35 40 45
 Ser Leu Leu Leu Pro Arg Ala Ala Gln Ile Leu Ala Ala Glu Ala Gly
 50 55 60
 Leu Pro Ser Ser Arg Ser Phe Met Gly Phe Ala Ala Pro Phe Thr Asn

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 480
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 617

<210> 5436

<211> 119

<212> PRT

<213> Homo sapiens

<400> 5436

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His	Pro	Leu	Ile	Ala	Arg	Ala	Lys	Gly	Lys	Thr	Met	Ala	Ser	Ser	Asp
		20						25					30		
Gly	Thr	Ile	Arg	Ala	Asn	Leu	Tyr	Phe	Lys	Ile	Leu	Gln	Pro	Lys	Met
	35					40					45				
Lys	Asn	Asn	His	Ile	Arg	Ser	Cys	Arg	Ala	Val	Leu	His	Arg	Ser	Asp
	50					55					60				
Leu	Leu	Val	Arg	Lys	Leu	Leu	Ala	Leu	Cys	Lys	Glu	Lys	Glu	Asp	Cys
65					70				75					80	
Asn	Arg	Asn	His	Glu	Pro	Gly	Arg	Glu	Met	Gly	Leu	Glu	Lys	Gly	Glu
			85					90						95	
Glu	Asn	Trp	Met	Ser	Asp	Ile	Ser	Glu	Thr	Gln	Asp	Pro	Phe	Leu	Gln
		100						105						110	
Tyr	Tyr	Ser	Thr	Ile	Val	Met									
		115													

<210> 5437

<211> 1422

<212> DNA

<213> Homo sapiens

<400> 5437

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 120
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 180
 gctgaggctg gcttaccttc gagcogttcc ttcattgggat ttgctgctcc cttaccaaac
 240
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 300

<400> 5433

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120
ctgggtataa gaagctcctc tggctctccag agttctcggg gtaaccctc catccaagcc
180
acgctcaata agactgtgct ttcctcttcc ttaaataacc acccacagac atctgttccc
240
aacgcatctg ctcttcaccc ttcgctccgt ctgttttccc ttagcaaccc atctcttccc
300
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360
tctcctggcc ctgaagcaca tcaag
385

<210> 5434

<211> 128

<212> PRT

<213> Homo sapiens

<400> 5434

Asp	Leu	Thr	Asn	Leu	His	Tyr	Ser	Thr	Pro	Leu	Pro	Ala	Ser	Leu	Asp
1			5						10				15		
Thr	Thr	Asp	His	His	Phe	Gly	Ser	Met	Ser	Val	Gly	Asn	Ser	Val	Asn
			20					25				30			
Asn	Ile	Pro	Ala	Ala	Met	Thr	His	Leu	Gly	Ile	Arg	Ser	Ser	Ser	Gly
			35				40				45				
Leu	Gln	Ser	Ser	Arg	Ser	Asn	Pro	Ser	Ile	Gln	Ala	Thr	Leu	Asn	Lys
	50					55				60					
Thr	Val	Leu	Ser	Ser	Ser	Leu	Asn	Asn	His	Pro	Gln	Thr	Ser	Val	Pro
65					70				75					80	
Asn	Ala	Ser	Ala	Leu	His	Pro	Ser	Leu	Arg	Leu	Phe	Ser	Leu	Ser	Asn
			85					90				95			
Pro	Ser	Leu	Ser	Thr	Thr	Asn	Leu	Ser	Gly	Pro	Ser	Arg	Arg	Arg	Gln
		100					105					110			
Pro	Pro	Val	Ser	Pro	Leu	Thr	Leu	Ser	Pro	Gly	Pro	Glu	Ala	His	Gln
		115					120					125			

<210> 5435

<211> 617

<212> DNA

<213> Homo sapiens

<400> 5435

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120
ccttgataa gtatactttg tataacttct ggcaaaccat aattatgaac tcacattact
180
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240

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<210> 5433
<211> 385
<212> DNA
<213> Homo sapiens
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Phe Arg Glu Val Arg Val Gln Ser Val Val Val Glu Phe Leu Leu Thr		
65	70	75
His Val Asp Val Leu Phe Ser Asp Thr Phe Thr Ser Ala Gly Leu Asp		
85	90	95
Pro Ala Gly Arg Cys Leu Leu Pro Arg Pro Lys Ser Leu Ala Gly Ser		
100	105	110
Cys Pro Ser Thr Arg Leu Leu Thr Leu Glu Glu Ala Gln Ala Arg Thr		
115	120	125
Gln Gly Arg Leu Gly Thr Pro Thr Glu Pro Thr Thr Pro Lys Ala Pro		
130	135	140
Ala Ser Pro Ala Glu Arg Lys Gly Glu Arg Gly Glu Lys Gln Arg		
145	150	155
Lys Pro Gly Gly Ser Ser Trp Lys Thr Phe Phe Ala Leu Gly Arg Gly		
165	170	175
Pro Ser Val Pro Arg Lys Lys Pro Leu Pro Trp Leu Gly Gly Thr Arg		
180	185	190
Ala Pro Pro Gln Pro Ser Gly Ser Arg Pro Asp Thr Val Thr Leu Arg		
195	200	205
Ser Ala Lys Ser Glu Glu Ser Leu Ser Ser Gln Ala Ser Gly Ala Gly		
210	215	220
Leu Gln Arg Leu His Arg Leu Arg Arg Pro His Ser Ser Ser Asp Ala		
225	230	235
Phe Pro Val Gly Pro Ala Pro Ala Gly Ser Cys Glu Ser Leu Ser Ser		
245	250	255
Ser Ser Ser Ser Glu Ser Ser Ser Ser Glu Ser Ser Ser Ser Ser Ser		
260	265	270
Glu Ser Ser Ala Ala Gly Leu Gly Ala Leu Ser Gly Ser Pro Ser His		
275	280	285
Arg Thr Ser Ala Trp Leu Asp Asp Gly Asp Glu Leu Asp Phe Ser Pro		
290	295	300
Pro Arg Cys Leu Glu Gly Leu Arg Gly Leu Asp Phe Asp Pro Leu Thr		
305	310	315
Phe Arg Cys Ser Ser Pro Thr Pro Gly Asp Pro Ala Pro Pro Ala Ser		
325	330	335
Pro Ala Pro Pro Ala Pro Ala Ser Ala Phe Pro Pro Arg Val Thr Pro		
340	345	350
Gln Ala Ile Ser Pro Arg Gly Pro Thr Ser Pro Ala Ser Pro Ala Ala		
355	360	365
Leu Asp Ile Ser Glu Pro Leu Ala Val Ser Val Pro Pro Ala Val Leu		
370	375	380
Glu Leu Leu Gly Ala Gly Gly Ala Pro Ala Ser Ala Thr Pro Thr Pro		
385	390	395
Ala Leu Ser Pro Gly Arg Ser Leu Arg Pro His Leu Ile Pro Leu Leu		
405	410	415
Leu Arg Gly Ala Glu Ala Pro Leu Thr Asp Ala Cys Gln Gln Glu Met		
420	425	430
Cys Ser Lys Leu Arg Gly Ala Gln Gly Pro Leu Gly Pro Asp Met Glu		
435	440	445
Ser Pro Leu Pro Pro Pro Pro Leu Ser Leu Leu Arg Pro Gly Gly Ala		
450	455	460
Pro Pro Pro Pro Pro Lys Asn Pro Ala Arg Leu Met Ala Leu Ala Leu		

tcacagggttc ctacccccgg cttcttctcc ccagcccccga gggagtgcct gccacccttc
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 1920
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 2160
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<210> 5432

<211> 863

<212> PRT

<213> Homo sapiens

<400> 5432

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Glu	Tyr	Leu	Leu	Arg	His	Leu	Ala	Arg	Met	Ala	Arg	His	Ser	Ala	Asn
			20					25					30		
Thr	Ser	Met	His	Ala	Arg	Asn	Leu	Ala	Ile	Val	Trp	Ala	Pro	Asn	Leu

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<210> 5430

<211> 94

<212> PRT

<213> Homo sapiens

<400> 5430

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Val	Lys	Gln	Glu	Arg	Gly	Glu	Gly	Pro	Arg	Ala	Gly	Glu	Lys	Gly	Ser
		20						25					30		
His	Glu	Glu	Glu	Val	Arg	Val	Pro	Ala	Leu	Ser	Trp	Gly	Arg	Pro	Arg
		35					40					45			
Ala	Pro	Ala	Pro	Ala	Ser	Lys	Pro	Arg	Pro	Arg	Leu	Asp	Leu	Asn	Cys
	50					55					60				
Leu	Trp	Leu	Arg	Pro	Gln	Pro	Ile	Phe	Leu	Trp	Lys	Leu	Arg	Pro	Arg
65					70				75					80	
Pro	Val	Pro	Ala	Ala	Thr	Pro	Leu	Thr	Gly	Pro	Leu	Pro	Leu		
				85					90						

<210> 5431

<211> 3005

<212> DNA

<213> Homo sapiens

<400> 5431

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 aggcacctgg cccgcatggc gagacacagt gccaacacca gcatgcatgc ccgcaacctg
 120
 gccattgtct gggcacccaa cctgctacgg tccatggagc tggagtcagt gggaatgggt
 180


```

65          70          75          80
Ser Asn Ile Gln Arg Leu Arg His Glu Phe Asp Ser Glu Arg Ile Pro
          85          90          95
Glu Leu

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<210> 5427
<211> 366
<212> DNA
<213> Homo sapiens
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<400> 5427
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120
tgaggatata tcagagggca aaatggatac agatactctg aaaaaacgtg cattctagct
180
gggattgggt cctccacact gtgtccaaaa ggtatgttgg ggttgctgaa gtagataaac
240
tggatttggc agcaggaaca gcatttatgg aacagagggg aagacacatt caaggaatga
300
aacatcgtct ggctggatca tgaaatgcaa ggcagatatg gcacaggagg cagacaaagg
360
gttgaa
366

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<210>- 5428
<211> 101
<212> PRT
<213> Homo sapiens
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<400> 5428
Met Phe His Ser Leu Asn Val Ser Ser Pro Leu Phe His Lys Cys Cys
 1              5              10              15
Ser Cys Cys Gln Tyr Gln Phe Ile Tyr Phe Ser Asn Pro Asn Ile Pro
 20              25              30
Phe Gly His Ser Val Glu Asp Pro Ile Pro Ala Arg Met His Val Phe
 35              40              45
Ser Glu Tyr Leu Tyr Pro Phe Cys Pro Leu Met Tyr Pro Gln His Leu
 50              55              60
Glu Glu His Leu Ala Cys Ser Arg Tyr Ser Thr Arg Ile Phe Asp Leu
 65              70              75              80
Phe Val Gly Leu Phe Met Thr Glu Ser Cys Ser Val Ala Gln Thr Gly
 85              90              95
Val Gln Tyr Ser Asp
 100

```

```
<210> 5429
<211> 612
<212> DNA
<213> Homo sapiens
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<400> 5429

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<210> 5425
<211> 639
<212> DNA
<213> Homo sapiens
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<210> 5426
<211> 98
<212> PRT
<213> Homo sapiens
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4609

65					70					75					80
Ala	Ser	Thr	Pro	Gln	Ser	Gln	Cys	Leu	Pro	Ser	Glu	Ile	Glu	Val	Lys
				85					90					95	
Tyr	Lys	Met	Ala	Glu	Cys	Tyr	Thr	Met	Leu	Lys	Gln	Asp	Lys	Asp	Ala
			100					105					110		
Ile	Ala	Ile	Leu	Asp	Gly	Ile	Pro	Ser	Arg	Gln	Arg	Thr	Pro	Lys	Ile
			115				120					125			
Asn	Met	Met	Leu	Ala	Asn	Leu	Tyr	Lys	Lys	Ala	Gly	Gln	Glu	Arg	Pro
			130				135				140				
Ser	Val	Thr	Ser	Tyr	Lys	Glu	Val	Leu	Arg	Gln	Cys	Pro	Leu	Ala	Leu
145					150					155					160
Asp	Ala	Ile	Leu	Gly	Leu	Leu	Ser	Leu	Ser	Val	Lys	Gly	Ala	Glu	Val
			165					170						175	
Ala	Ser	Met	Thr	Met	Asn	Val	Ile	Gln	Thr	Val	Pro	Asn	Leu	Asp	Trp
			180					185					190		
Leu	Ser	Val	Trp	Ile	Lys	Ala	Tyr	Ala	Phe	Val	His	Thr	Gly	Asp	Asn
			195				200					205			
Ser	Arg	Ala	Ile	Ser	Thr	Ile	Cys	Ser	Leu	Glu	Lys	Lys	Ser	Leu	Leu
			210			215					220				
Arg	Asp	Asn	Val	Asp	Leu	Leu	Gly	Ser	Leu	Ala	Asp	Leu	Tyr	Phe	Arg
225					230					235					240
Ala	Gly	Asp	Asn	Lys	Asn	Ser	Val	Leu	Lys	Phe	Glu	Gln	Ala	Gln	Met
			245					250						255	
Leu	Asp	Pro	Tyr	Leu	Ile	Lys	Gly	Met	Asp	Val	Tyr	Gly	Tyr	Leu	Leu
			260					265					270		
Ala	Arg	Glu	Gly	Arg	Leu	Glu	Asp	Val	Glu	Asn	Leu	Gly	Cys	Arg	Leu
			275				280					285			
Phe	Asn	Ile	Ser	Asp	Gln	His	Ala	Glu	Pro	Trp	Val	Val	Ser	Gly	Cys
			290			295					300				
His	Ser	Phe	Tyr	Ser	Lys	Arg	Tyr	Ser	Arg	Ala	Leu	Tyr	Leu	Gly	Ala
305					310					315					320
Lys	Ala	Ile	Gln	Leu	Asn	Ser	Asn	Ser	Val	Gln	Ala	Leu	Leu	Leu	Lys
			325					330						335	
Gly	Ala	Ala	Leu	Arg	Asn	Met	Gly	Arg	Val	Gln	Glu	Ala	Ile	Ile	His
			340					345					350		
Phe	Arg	Glu	Ala	Ile	Arg	Leu	Ala	Pro	Cys	Arg	Leu	Asp	Cys	Tyr	Glu
			355				360					365			
Gly	Leu	Ile	Glu	Cys	Tyr	Leu	Ala	Ser	Asn	Ser	Ile	Arg	Glu	Ala	Met
			370			375					380				
Val	Met	Ala	Asn	Asn	Val	Tyr	Lys	Thr	Leu	Gly	Ala	Asn	Ala	Gln	Thr
385					390					395					400
Leu	Thr	Leu	Leu	Ala	Thr	Val	Cys	Leu	Glu	Asp	Pro	Val	Thr	Gln	Glu
			405					410						415	
Lys	Ala	Lys	Thr	Leu	Leu	Asp	Lys	Ala	Leu	Thr	Gln	Arg	Pro	Asp	Tyr
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<211> 570

<212> PRT

<213> Homo sapiens

<400> 5424

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			20					25					30		
Lys	Tyr	Gln	Leu	Leu	Val	Tyr	His	Ala	Asp	Ser	Leu	Phe	His	Asp	Lys
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Glu	Tyr	Arg	Asn	Ala	Val	Ser	Lys	Tyr	Thr	Met	Ala	Leu	Gln	Gln	Lys
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<210> 5423
<211> 2427
<212> DNA
<213> Homo sapiens

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<211> 276

<212> PRT

<213> Homo sapiens

<400> 5422

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Thr	Gln	Pro	Leu	Gly	Leu	Leu	Arg	Leu	Leu	Gln	Leu	Val	Ser	Thr
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Val	Ala	Phe	Ser	Leu	Val	Ala	Ser	Val	Gly	Ala	Trp	Thr	Gly	Ser
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Ile	Ile	Leu	Ile	Val	Glu	Leu	Cys	Gly	Leu	Gln	Ala	Arg	Phe	Pro
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Ser	Trp	Arg	Asn	Phe	Pro	Ile	Thr	Phe	Ala	Cys	Tyr	Ala	Ala	Leu
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Cys	Leu	Ser	Ala	Ser	Ile	Ile	Tyr	Pro	Thr	Thr	Tyr	Val	Gln	Phe
		115					120					125		Leu
Ser	His	Gly	Arg	Ser	Arg	Asp	His	Ala	Ile	Ala	Ala	Thr	Phe	Phe
	130					135					140			Ser
Cys	Ile	Ala	Cys	Val	Ala	Tyr	Ala	Thr	Glu	Val	Ala	Trp	Thr	Arg
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Arg	Pro	Gly	Glu	Ile	Thr	Gly	Tyr	Met	Ala	Thr	Val	Pro	Gly	Leu
			165						170					Leu
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		180						185				190		Ser
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Val	Tyr	Ala	Ile	Cys	Phe	Ile	Leu	Ala	Ala	Ile	Ala	Ile	Leu	Leu
	210					215					220			Asn
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225					230					235				Leu
Ser	Gly	Leu	Ala	Leu	Cys	Leu	Ser	Ser	Ser	Met	Pro	Pro	Pro	Leu
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Ile Ala Arg Gly Gln Arg Tyr Tyr Gly Phe Gly Arg Thr Val Tyr Pro
      85                90                95
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      100                105                110
Arg Thr Pro Phe Arg Leu Ser Glu Lys Asp Arg Met Glu Leu Leu Glu
      115                120                125
Ile Ala Lys Thr Asn Ala Ala Lys Ala Leu Gly Thr Thr Asn Ile Asp
      130                135                140
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<210> 5421

<211> 1239

<212> DNA

<213> Homo sapiens

<400> 5421

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 <212> DNA
 <213> Homo sapiens

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<210> 5420
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 <212> PRT
 <213> Homo sapiens

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				85					90					95						
Lys	Gly	Pro	Val	Ala	Val	Thr	Gly	Ala	Ser	Thr	Pro	Glu	Gly	Thr	Ala					
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Gln	Arg	Pro	Thr	Gln	Pro	Val	Tyr	Gln	Ile	Gln	Asn	Arg	Gly	Met	Gly					
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Thr	Ala	Ala	Pro	Ala	Ala	Met	Asp	Pro	Val	Val	Gly	Gln	Ala	Lys	Leu					
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				245					250					255						
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			340					345					350							
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<211> 528

<212> PRT

<213> Homo sapiens

<400> 5418

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<210> 5416
 <211> 55
 <212> PRT
 <213> Homo sapiens

<400> 5416
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<210> 5417
 <211> 2087
 <212> DNA
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<212> DNA

<213> Homo sapiens

<400> 5415

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1493

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<211> 1493

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<211> 426

<212> PRT

<213> Homo sapiens

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Ser Gln Leu Asp Arg Asn Leu Asp Arg Glu Met Lys Pro Asp Pro Thr
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Pro Leu Leu Thr Ser Arg His Asn Val Phe Gln Asn Asp Glu Phe Asp
      420              425              430
Val Phe Ser Arg Asp Ser Val Asp Leu Ser Arg Val His Lys Gly Lys
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Ser Thr Arg Lys Glu Glu Asn Thr Arg Ser Leu Leu Asn Asp Lys Arg
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Glu Glu Val Pro Leu Gln Pro Gly Glu Ser Leu Pro Tyr His Ser Val
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Tyr Tyr Glu Asp Glu Tyr Asp Asp Thr Tyr Asp Gly Asn Gln Val Gly
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Pro Ser Gln Val Leu Arg Thr Lys Val Pro Arg Glu Gly Gln Glu Glu
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<212> DNA

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 Met Ile Gly Asn Ile Phe Thr Gln Gln Pro Ser Tyr Tyr Ser Asp Leu
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 Asp Glu Thr Leu Pro Thr Ile Leu Gln Val Phe Ser Asn Ile Leu Gln
 85 90 95
 His Cys Gly Leu Gln Gly Asp Gly Ala Asn Thr Thr Pro Gln Lys Leu
 100 105 110
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 130 135 140
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 145 150 155 160
 Phe Cys Tyr Arg Leu Ala Ser Phe Tyr Glu Ala Ala Ile Pro Glu Met
 165 170 175
 Glu Ser Ala Ile Lys Lys Arg Arg Leu Glu Asp Ser Lys Leu Leu Gly
 180 185 190
 Asp Leu Trp Gln Arg Leu Ser His Ser Arg Lys Lys Leu Met Glu Ile
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 Phe His Ile Ile Leu Asn Gln Ile Cys Leu Leu Pro Ile Leu Glu Ser
 210 215 220
 Ser Cys Asp Asn Ile Gln Gly Phe Ile Glu Glu Phe Leu Gln Ile Phe
 225 230 235 240
 Ser Ser Leu Leu Gln Glu Lys Arg Phe Leu Arg Asp Tyr Asp Ala Leu
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 Phe Pro Val Ala Glu Asp Ile Ser Leu Leu Gln Gln Ala Ser Ser Val
 260 265 270
 Leu Asp Glu Thr Arg Thr Ala Tyr Ile Leu Gln Ala Val Glu Ser Ala
 275 280 285
 Trp Glu Gly Val Asp Arg Arg Lys Ala Thr Asp Ala Lys Asp Pro Ser
 290 295 300
 Val Ile Glu Glu Pro Asn Gly Glu Pro Asn Gly Val Thr Val Thr Ala
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 325 330 335
 Glu Cys Met Gly Ala Ala Ala Val Gly Pro Ala Met Cys Gly Val
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 Glu Leu Asp Ser Leu Ile Ser Gln Val Lys Asp Leu Leu Pro Asp Leu
 355 360 365
 Gly Glu Gly Phe Ile Leu Ala Cys Leu Glu Tyr Tyr His Tyr Asp Pro

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<211> 2802

<212> DNA

<213> Homo sapiens

<400> 5411

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<211> 198

<212> PRT

<213> Homo sapiens

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 2010

<210> 5408

<211> 335

<212> PRT

<213> Homo sapiens

<400> 5408

Met	Ala	Ala	Arg	Trp	Arg	Phe	Trp	Cys	Val	Ser	Val	Thr	Met	Val	Val
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Ala	Leu	Leu	Ile	Val	Cys	Asp	Val	Pro	Ser	Ala	Ser	Ala	Gln	Arg	Lys
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Lys	Glu	Met	Val	Leu	Ser	Glu	Lys	Val	Ser	Gln	Leu	Met	Glu	Trp	Thr
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Asn	Lys	Arg	Pro	Val	Ile	Arg	Met	Asn	Gly	Asp	Lys	Phe	Arg	Arg	Leu
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Val	Lys	Ala	Pro	Pro	Arg	Asn	Tyr	Ser	Val	Ile	Val	Met	Phe	Thr	Ala
	65				70					75				80	
Leu	Gln	Leu	His	Arg	Gln	Cys	Val	Val	Cys	Lys	Gln	Ala	Asp	Glu	Glu
			85						90				95		
Phe	Gln	Ile	Leu	Ala	Asn	Ser	Trp	Arg	Tyr	Ser	Ser	Ala	Phe	Thr	Asn
			100					105					110		
Arg	Ile	Phe	Phe	Ala	Met	Val	Asp	Phe	Asp	Glu	Gly	Ser	Asp	Val	Phe
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Gln	Met	Leu	Asn	Met	Asn	Ser	Ala	Pro	Thr	Phe	Ile	Asn	Phe	Pro	Ala
	130					135				140					
Lys	Gly	Lys	Pro	Lys	Arg	Gly	Asp	Thr	Tyr	Glu	Leu	Gln	Val	Arg	Gly
	145				150					155				160	
Phe	Ser	Ala	Glu	Gln	Ile	Ala	Arg	Trp	Ile	Ala	Asp	Arg	Thr	Asp	Val
			165					170					175		
Asn	Ile	Arg	Val	Ile	Arg	Pro	Pro	Asn	Tyr	Ala	Gly	Pro	Leu	Met	Leu
			180					185					190		
Gly	Leu	Leu	Leu	Ala	Val	Ile	Gly	Gly	Leu	Val	Tyr	Leu	Arg	Arg	Ser
		195					200					205			
Asn	Met	Glu	Phe	Leu	Phe	Asn	Lys	Thr	Gly	Trp	Ala	Phe	Ala	Ala	Leu
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Cys	Phe	Val	Leu	Ala	Met	Thr	Ser	Gly	Gln	Met	Trp	Asn	His	Ile	Arg
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Gly	Pro	Pro	Tyr	Ala	His	Lys	Asn	Pro	His	Thr	Gly	His	Val	Asn	Tyr
			245					250					255		
Ile	His	Gly	Ser	Ser	Gln	Ala	Gln	Phe	Val	Ala	Glu	Thr	His	Ile	Val
			260					265					270		
Leu	Leu	Phe	Asn	Gly	Gly	Val	Thr	Leu	Gly	Met	Val	Leu	Leu	Cys	Glu

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240
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<210> 5406
 <211> 291
 <212> PRT
 <213> Homo sapiens

<400> 5406
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 Ala Gln Cys Leu Arg Asn Gly Gln Val Ile Glu Pro Asp Lys Asn Arg
 35 40 45
 Lys Tyr Cys Ser Ala Lys Ala Arg His Ser Trp Thr Lys Asp Arg Arg
 50 55 60
 Ala Met Arg Val Met Ser Ile Glu Arg Lys Lys Trp Met Asn Ile Arg
 65 70 75 80
 Pro Leu Pro Thr Lys Lys Gln Met Pro Leu Gln Phe Asp Leu Cys Asn
 85 90 95
 His Ile Ala Ser Gly Lys Lys Cys Gln Tyr Val Gly Asn Cys Ser Phe
 100 105 110
 Ala His Ser Pro Glu Glu Arg Glu Val Trp Thr Tyr Met Lys Glu Asn
 115 120 125
 Gly Ile Gln Asp Met Glu Gln Phe Tyr Glu Leu Trp Leu Lys Ser Gln
 130 135 140
 Lys Asn Glu Lys Ser Glu Asp Ile Ala Ser Gln Ser Asn Lys Glu Asn
 145 150 155 160
 Gly Lys Gln Ile His Met Pro Thr Asp Tyr Ala Glu Val Thr Val Asp
 165 170 175
 Phe His Cys Trp Met Cys Gly Lys Asn Cys Asn Ser Glu Lys Gln Trp
 180 185 190
 Gln Gly His Ile Ser Ser Glu Lys His Lys Glu Lys Val Phe His Thr
 195 200 205
 Glu Asp Asp Gln Tyr Cys Trp Gln His Arg Phe Pro Thr Gly Tyr Phe
 210 215 220
 Ser Ile Cys Asp Arg Tyr Met Asn Gly Thr Cys Pro Glu Gly Asn Ser
 225 230 235 240
 Cys Lys Phe Ala His Gly Asn Ala Glu Leu His Glu Trp Glu Glu Arg
 245 250 255
 Arg Asp Ala Leu Lys Met Lys Leu Asn Lys Ala Arg Lys Asp His Leu
 260 265 270
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 Asp Leu Asn
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<210> 5407
 <211> 2010
 <212> DNA
 <213> Homo sapiens

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60
cctggatttc ttaatatgaa gataaagttt gtgtgcgccc agtgtctgag aaacgggtcaa
120
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180
aaagaccggc gtgcgatgag agtgatgtct attgaacgta agaagtggat gaacatccgt
240
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300
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360
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420
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480
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780
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900
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960
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1020
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1080
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1140
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1200
gacggtaaga gaataaacac ttgtactggg atcagaatac atgatggatg aaattcctta
1260
catgttttag cagaatgaat ttgtttaata taataaagtt tgctacttat ctgtatgtag
1320
gttgctaaaa aggttttct taactcagat tttaagccaa ataaccattt aacactagta
1380
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1440
taatgtgcat tgagaatatt ttgaaaaata attgactcaa attttatctt ttggtctttt
1500
gctgttttaa tgatgatttt gaaagattaa acctgtactg ttggtattgt gttagtgtat
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<212> DNA

<213> Homo sapiens

<400> 5403

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 180
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 300
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<210> 5404

<211> 150

<212> PRT

<213> Homo sapiens

<400> 5404

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 Ser Pro Ala Leu Thr Met Ala Pro Ser Ser Leu Gly Ala Leu Gly Pro
 35 40 45
 Trp Val Gly Ala Leu Glu Leu Pro Arg Leu Gln Ala Pro Leu Ser Gln
 50 55 60
 Pro Gly Thr His Ala Gly Ala Xaa Asp Pro Arg Pro Ser Leu Arg Lys
 65 70 75 80
 Ala Ser Leu Arg Ala Ala Ser Pro Ala Ala Ser Ser Ser Pro Trp Ala
 85 90 95
 Arg Val Pro Cys Ser Arg Ala Arg Arg Pro Lys Ser Ala Glu Leu Leu
 100 105 110
 Arg Ile Pro Gly Thr Ser Thr Arg Pro Lys Lys Glu Arg Gly Cys Pro
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 130 135 140
 Gly Pro Gly Pro Gln Ala
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<210> 5405

<211> 1609

<212> DNA

<213> Homo sapiens

<400> 5405

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 130 135 140
 Lys Leu Ser Asp Met His Gln Ile Val Asn Ile Asp Leu Met Leu Glu
 145 150 155 160
 Met Ser Thr Ser Leu Ala Ala Val Thr Pro Ile Ile Glu Arg Glu Ser
 165 170 175
 Gly Gly His His Tyr Val Asn Met Thr Leu Pro Val Asp Ala Val Ile
 180 185 190
 Ser Val Ala Pro Glu Glu Thr Trp Gly Lys Val Arg Lys Leu Leu Val
 195 200 205
 Asp Ala Ile His Asn Gln Leu Thr Asp Met Glu Lys Cys Ile Leu Lys
 210 215 220
 Tyr Met Lys Arg Thr Ser Ile Val Val Pro Glu Pro Leu His Phe Leu
 225 230 235 240
 Leu Pro Gly Lys Lys Asn Leu Val Thr Ile Ser Tyr Pro Ser Gly Ile
 245 250 255
 Pro Asp Gly Gln Leu Gln Ala Tyr Arg Lys Glu Leu His Asp Leu Phe
 260 265 270
 Asn Leu Pro His Asp Arg Pro Tyr Phe Lys Arg Ser Asn Ala Tyr His
 275 280 285
 Phe Pro Asp Glu Pro Tyr Lys Asp Gly Tyr Ile Arg Asn Pro His Thr
 290 295 300
 Tyr Leu Asn Pro Pro Asn Met Glu Thr Gly Met Ile Tyr Val Val Gln
 305 310 315 320
 Gly Ile Tyr Gly Tyr His His Tyr Met Gln Asp Arg Ile Asp Asp Asn
 325 330 335
 Gly Trp Gly Cys Ala Tyr Arg Ser Leu Gln Thr Ile Cys Ser Trp Phe
 340 345 350
 Lys His Gln Gly Tyr Thr Glu Arg Ser Ile Pro Thr His Arg Glu Ile
 355 360 365
 Gln Gln Ala Leu Val Asp Ala Gly Asp Lys Pro Ala Thr Phe Val Gly
 370 375 380
 Ser Arg Gln Trp Ile Gly Ser Ile Glu Val Gln Leu Val Leu Asn Gln
 385 390 395 400
 Leu Ile Gly Ile Thr Ser Lys Ile Leu Phe Val Ser Gln Gly Ser Glu
 405 410 415
 Ile Ala Ser Gln Gly Arg Glu Leu Ala Asn His Phe Gln Ser Glu Gly
 420 425 430
 Thr Pro Val Met Ile Gly Gly Gly Val Leu Ala His Thr Ile Leu Gly
 435 440 445
 Val Ala Trp Asn Glu Ile Thr Gly Gln Ile Lys Phe Leu Ile Leu Asp
 450 455 460
 Pro His Tyr Thr Gly Ala Glu Asp Leu Gln Val Ile Leu Glu Lys Gly
 465 470 475 480
 Trp Cys Gly Trp Lys Gly Pro Asp Phe Trp Asn Lys Asp Ala Tyr Tyr
 485 490 495
 Asn Leu Cys Leu Pro Gln Arg Pro Asn Met Ile
 500 505

<210> 5403

<211> 451

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 1800
 gagattagac acaacatatg gtaaagccaa aagcaggagc ttatagattt gcatgaaatg
 1860
 aaggcgttct tcagacttct tcataaccce cgtgacatct gtttttaaaa acacgttaac
 1920
 attaaaaact tttttttaaa aagagtttta tccccaaact tccaccatgc agtcccattt
 1980
 ttggtctcta gactctggta agtataacca gtactaaaat gttaatgaga atgaaacaat
 2040
 actactagaa atacgagtgt cagtattaaa tggaataata aatgctatgc aaacaagaga
 2100
 tcactgcggtg agggaaaaag cagcagctct gagttactta ccagcacttc cttttccac
 2160
 tgggtatttc tacacttccg agactccgtt tctgtctgag cacggcaaca caatcattcc
 2220
 tgtcagggtg ttcacttgc tttattgtct gcatacattt aattgttgta agaaacttgg
 2280
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 2340
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 2400
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 2460
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 2520
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 2580
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<210> 5402

<211> 507

<212> PRT

<213> Homo sapiens

<400> 5402

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Phe	Lys	Ala	Arg	Pro	Arg	Glu	Phe	Trp	Ala	Arg	Cys	Lys	Arg	Pro	Cys
		20						25				30			
Pro	Arg	His	Val	Ala	Asp	Met	Val	Ile	Ser	Glu	Ser	Met	Asp	Ile	Leu
		35					40				45				
Phe	Arg	Ile	Arg	Gly	Gly	Leu	Asp	Leu	Ala	Phe	Gln	Leu	Ala	Thr	Pro
	50					55				60					
Asn	Glu	Ile	Phe	Leu	Lys	Lys	Ala	Leu	Lys	His	Val	Leu	Ser	Asp	Leu
65				70					75					80	
Ser	Thr	Lys	Leu	Ser	Ser	Asn	Ala	Leu	Val	Phe	Arg	Ile	Cys	His	Ser
			85					90					95		
Ser	Val	Tyr	Ile	Trp	Pro	Ser	Ser	Asp	Ile	Asn	Thr	Ile	Pro	Gly	Glu

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180
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240
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300
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1680

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<210> 5400

<211> 186

<212> PRT

<213> Homo sapiens

<400> 5400

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Gly	Pro	Thr	Met	Gly	Arg	Ser	Gln	Gly	Ser	Pro	Met	Asp	Pro	Met	Val
		20						25				30			
Met	Lys	Arg	Pro	Gln	Leu	Tyr	Gly	Met	Gly	Ser	Asn	Pro	His	Ser	Gln
		35					40				45				
Pro	Gln	Gln	Ser	Ser	Pro	Tyr	Pro	Gly	Gly	Ser	Tyr	Gly	Pro	Pro	Gly
		50				55					60				
Pro	Gln	Arg	Tyr	Pro	Ile	Gly	Ile	Gln	Gly	Arg	Thr	Pro	Gly	Ala	Met
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Ala	Gly	Met	Gln	Tyr	Pro	Gln	Gln	Gln	Met	Pro	Pro	Gln	Tyr	Gly	Gln
			85						90					95	
Gln	Gly	Val	Ser	Gly	Tyr	Cys	Gln	Gln	Gly	Gln	Gln	Pro	Tyr	Tyr	Ser
		100						105					110		
Gln	Gln	Pro	Gln	Pro	Pro	His	Leu	Pro	Pro	Gln	Ala	Gln	Tyr	Leu	Pro
		115					120					125			
Ser	Gln	Ser	Gln	Gln	Arg	Tyr	Gln	Pro	Gln	Gln	Asp	Met	Ser	Gln	Glu
		130				135					140				
Gly	Tyr	Gly	Thr	Arg	Ser	Gln	Pro	Pro	Leu	Ala	Pro	Gly	Lys	Pro	Asn
145					150					155				160	
His	Glu	Asp	Leu	Asn	Leu	Ile	Gln	Gln	Glu	Arg	Pro	Ser	Ser	Leu	Pro
			165						170					175	
Val	Arg	His	Tyr	Cys	Ala	Asp	Leu	Glu	Met						
			180					185							

<210> 5401

<211> 2674

<212> DNA

<213> Homo sapiens

<400> 5401

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 gcatatccac cgagggcctc tctgcttctt ttgacctttt tcagagtttc agagttatga
 540
 accaaatcgc cttcatgaga g
 561

<210> 5398
 <211> 154
 <212> PRT
 <213> Homo sapiens

<400> 5398
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 Thr Ser Ile Pro Ile Ser Pro Pro Leu Thr Pro Gln Asp Ala Asn Glu
 35 40 45
 Ala Gln Gly Trp Ala Glu Ala Gly Arg Ala Val His Arg Glu Asp Pro
 50 55 60
 Arg Val Ser Leu Gly Leu Pro Arg Trp Leu Cys Pro Pro Phe Cys Leu
 65 70 75 80
 Gly Gly Ser Leu Arg Leu Gly Arg Ala Gln Arg Glu Gly Asp Pro Glu
 85 90 95
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<212> PRT

<213> Homo sapiens

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<212> DNA

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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Lys Ser Thr Ser Lys Thr Tyr Val Ile Ser Arg Thr Glu Pro Ala Met
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<211> 797

<212> DNA

<213> Homo sapiens

<400> 5391

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<210> 5392

<211> 55

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<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 5390

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<210> 5388

<211> 125

<212> PRT

<213> Homo sapiens

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Phe	Thr	Trp	Cys	Phe	Cys	Phe	Ser	Met	Thr	Leu	Ile	Ile	Leu	Ile	Val
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Glu	Leu	Cys	Gly	Leu	Gln	Ala	Arg	Phe	Pro	Leu	Ser	Trp	Arg	Asn	Phe
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Pro	Ile	Thr	Phe	Ala	Cys	Tyr	Ala	Ala	Leu	Phe	Cys	Leu	Ser	Ala	Ser
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Arg	Asp	His	Ala	Ile	Ala	Ala	Thr	Phe	Phe	Ser	Cys	Ile	Ala	Cys	Val
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<210> 5389

<211> 1711

<212> DNA

<213> Homo sapiens

<400> 5389

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<210> 5385

<211> 314

<212> DNA

<213> Homo sapiens

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<210> 5386

<211> 100

<212> PRT

<213> Homo sapiens

<400> 5386

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20 25 30

Ser Val Pro Ser Pro Pro Arg Ala Gln Pro Leu Gly Arg Gly Leu His

35 40 45

Ala Gly Trp Leu Ala Arg Leu Gly Gln Pro Gly Leu Leu Gly Pro Tyr

50 55 60

Ala Ala Pro Thr Phe His Phe Leu Glu Met His Pro His Leu Gln Glu

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Gly Pro Asn Ala

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<210> 5387

<211> 375

<212> DNA

<213> Homo sapiens

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	100	105
Thr Gly Phe Cys His Leu Tyr Lys Val Thr Ala Val Leu Lys Ser Gln		110
	115	120
Gly Tyr Asp Trp Ser Glu Pro Phe Ser Pro Gly Glu Gly Glu Gln Ser		125
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Gln Gly Thr Lys Asp Thr Pro Leu Glu His His Leu Tyr Val Val Ser		160
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Tyr Glu Ala Ala Gly Glu Ile Val Arg Leu Thr Thr Pro Gly Phe Ser		175
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Ser Ser Val Ser Thr Pro Pro Cys Val His Val Tyr Lys Leu Ser Gly		205
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His Pro Thr Val Leu Phe Val Tyr Gly Gly Pro Gln Val Gln Leu Val		270
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Asn Asn Ser Phe Lys Gly Ile Lys Tyr Leu Arg Leu Asn Thr Leu Ala		285
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Glu Ile Glu Asp Gln Val Glu Gly Leu Gln Phe Val Ala Glu Lys Tyr		335
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Gly Phe Ile Asp Leu Ser Arg Val Ala Ile His Gly Trp Ser Tyr Gly		350
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Gly Phe Leu Ser Leu Met Gly Leu Ile His Lys Pro Gln Val Phe Lys		365
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Tyr Glu Ala Gly Ser Val Ala Leu His Val Glu Lys Leu Pro Asn Glu		415
	420	425
Pro Asn Arg Leu Leu Ile Leu His Gly Phe Leu Asp Glu Asn Val His		430
	435	440
Phe Phe His Thr Asn Phe Leu Val Ser Gln Leu Ile Arg Ala Gly Lys		445
	450	455
Pro Tyr Gln Leu Gln Val Ala Leu Pro Pro Val Ser Pro Gln Ile Tyr		460
465	470	475
Pro Asn Glu Arg His Ser Ile Arg Cys Pro Glu Ser Gly Glu His Tyr		480

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<210> 5384

<211> 508

<212> PRT

<213> Homo sapiens

<400> 5384

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 Leu Phe Ile Pro Ser Thr Glu Asn Glu Glu Gln Arg Leu Ala Ser Ala

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Ala	Glu	Ile	Glu	Asp	Ala	Ile	Ala	Asp	His	Pro	Ala	Val	Pro	Glu Ser
			100					105					110	
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Phe	Ile	Val	Val	Lys	Asp	Ser	Ala	Gly	Asp	Ser	Asp	Val	Val	Val Gln
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Glu	Leu	Lys	Ser	Met	Val	Ala	Thr	Lys	Ile	Ala	Lys	Tyr	Ala	Val Pro
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Asp	Glu	Ile	Leu	Val	Val	Lys	Arg	Leu	Pro	Lys	Thr	Arg	Ser	Gly Lys
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Val	Met	Arg	Arg	Leu	Leu	Arg	Lys	Ile	Ile	Thr	Ser	Glu	Ala	Gln Glu
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<210> 5383

<211> 2027

<212> DNA

<213> Homo sapiens

<400> 5383

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<210> 5382

<211> 223

<212> PRT

<213> Homo sapiens

<400> 5382

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 675 680 685
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 690 695 700
 Ile Gly Ala Ser Glu Gly Ser Pro Tyr Ser Gly Pro Thr Arg Ser Trp
 705 710 715 720
 Ser Pro Phe Arg Ser Met Pro Pro Asp Arg Leu Asn Ala Ser Tyr Gly
 725 730 735
 Met Leu Gly Gln Ser Pro Pro Leu His Arg Ser Pro Asp Phe Leu Leu
 740 745 750
 Ser Tyr Pro Pro Ala Pro Ser Cys Phe Pro Pro Asp His Leu Gly Tyr
 755 760 765
 Ser Ala Pro Gln His Pro Ala Arg Arg Pro Thr Pro Pro Glu Pro Leu
 770 775 780
 Tyr Val Asn Leu Ala Leu Gly Pro Arg Gly Pro Ser Pro Ala Ser Ser
 785 790 795 800
 Ser Ser Ser Ser Pro Pro Ala His Pro Arg Ser Arg Ser Asp Pro Gly
 805 810 815
 Pro Pro Val Pro Arg Leu Pro Gln Lys Gln Arg Ala Pro Trp Gly Pro
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 Arg Thr Pro His Arg Val Pro Gly Pro Trp Gly Pro Pro Glu Pro Leu
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<210> 5381

<211> 1576

<212> DNA

<213> Homo sapiens

<400> 5381

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<212> PRT

<213> Homo sapiens

<400> 5380

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Ser	Cys	Ala	Pro	Ala	Leu	Leu	Gly	Ser	Gly	Cys	Gly	Ser	Gly	Glu	Ser
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<211> 3213

<212> DNA

<213> Homo sapiens

<400> 5379

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<212> DNA

<213> Homo sapiens

<400> 5377

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Tyr Tyr Gln Lys Ala Leu Glu Leu Pro Pro Leu Val Val Glu Gly Ile				
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<211> 886

<212> PRT

<213> Homo sapiens

<400> 5374

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Glu	Met	Ser	Leu	Glu	Gln	Asp	Asn	Ile	Lys	Gln	Ala	Ile	Phe	Cys	Tyr
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Thr	Lys	Ala	Leu	Lys	Tyr	Glu	Pro	Thr	Asn	Val	Arg	Tyr	Leu	Trp	Glu
			245						250				255		
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		260						265					270		
Gly	Tyr	Arg	Arg	Ile	Leu	Asn	Leu	Leu	Ser	Pro	Ser	Asp	Gly	Glu	Arg
	275					280						285			
Phe	Met	Gln	Leu	Ala	Arg	Asp	Met	Ala	Lys	Ser	Tyr	Tyr	Glu	Ala	Asn
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Asp	Val	Thr	Ser	Ala	Ile	Asn	Ile	Ile	Asp	Glu	Ala	Phe	Ser	Lys	His
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Gln	Gly	Leu	Val	Ser	Met	Glu	Asp	Val	Asn	Ile	Ala	Ala	Glu	Leu	Tyr
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Gln Trp Ser Ser Val Cys Pro Leu Pro Ala Gly His Gly Glu Pro Gly
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Ile Ala Val Leu Asp Asn Arg Ile Tyr Val Leu Gly Gly Arg Ser His
          275          280          285
Asn Arg Gly Ser Arg Thr Gly Tyr Val His Ile Tyr Asp Val Glu Lys
          290          295          300
Asp Cys Trp Glu Glu Gly Pro Gln Leu Asp Asn Ser Ile Ser Gly Leu
305          310          315          320
Ala Ala Cys Val Leu Thr Leu Pro Arg Ser Leu Leu Leu Glu Pro Pro
          325          330          335
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<210> 5373

<211> 4221

<212> DNA

<213> Homo sapiens

<400> 5373

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<210> 5372

<211> 368

<212> PRT

<213> Homo sapiens

<400> 5372

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			20					25					30		
Val	Val	Gly	Phe	Gly	Gly	Ile	His	Ser	Thr	Pro	Ser	Thr	Val	Leu	Ser
		35				40						45			
Asp	Gln	Ala	Lys	Tyr	Leu	Asn	Pro	Leu	Leu	Gly	Glu	Trp	Lys	His	Phe
	50					55				60					
Thr	Ala	Ser	Leu	Ala	Pro	Arg	Met	Ser	Asn	Gln	Gly	Ile	Ala	Val	Leu
65					70				75					80	
Asn	Asn	Phe	Val	Tyr	Leu	Ile	Gly	Gly	Asp	Asn	Asn	Val	Gln	Gly	Phe
			85					90					95		
Arg	Ala	Glu	Ser	Arg	Cys	Trp	Arg	Tyr	Asp	Pro	Arg	His	Asn	Arg	Trp
			100					105					110		
Xaa	Pro	Asp	Pro	Val	Pro	Ala	Ala	Gly	Ala	Arg	Arg	Pro	Val	Xaa	Val
		115					120					125			
Cys	Val	Val	Gly	Arg	Tyr	Ile	Tyr	Ala	Val	Ala	Gly	Arg	Asp	Tyr	His
		130				135					140				
Asn	Asp	Leu	Asn	Ala	Val	Glu	Arg	Tyr	Asp	Pro	Ala	Thr	Asn	Ser	Trp
145				150					155					160	
Ala	Tyr	Val	Ala	Pro	Leu	Lys	Arg	Glu	Val	Tyr	Ala	His	Ala	Gly	Ala
			165					170						175	
Thr	Leu	Glu	Gly	Lys	Met	Tyr	Ile	Thr	Cys	Gly	Arg	Arg	Gly	Glu	Asp
		180						185					190		
Tyr	Leu	Lys	Glu	Thr	His	Cys	Tyr	Asp	Pro	Gly	Ser	Asn	Thr	Trp	His
		195					200					205			
Thr	Leu	Ala	Asp	Gly	Pro	Val	Arg	Arg	Ala	Trp	His	Gly	Met	Ala	Thr
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<211> 148
 <212> PRT
 <213> Homo sapiens

<400> 5370
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 Ile Tyr Glu Leu Thr Val Leu Lys Asp Pro Tyr Thr Gly Met His Lys
 35 40 45
 Gly Gly Arg Pro Ala Pro Ser Pro Leu Ser Pro Ser Leu Arg Leu Pro
 50 55 60
 Pro His Leu Pro Ala Ser Ser Leu Pro His His His Pro Ser Ser Ala
 65 70 75 80
 His Leu Pro Pro Leu Pro Ala Ser Ala Gly Ala Ser Val Leu Thr Pro
 85 90 95
 Ser Leu Pro Pro Thr Pro Pro Pro Leu Ser Gly Gly Ala Ala Asp Arg
 100 105 110
 Ser Glu Arg Ala Pro Ser Pro Pro Pro Pro Pro Leu Pro Pro Ser Pro
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<210> 5371
 <211> 1177
 <212> DNA
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<211> 137

<212> PRT

<213> Homo sapiens

<400> 5368

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      20           25           30
Ala Lys Ala Ala Pro Arg Ala Tyr Ser Asp His Asp Asp Arg Trp Glu
      35           40           45
Thr Lys Glu Gly Ala Ala Ser Pro Ala Pro Glu Thr Pro Gln Pro Thr
      50           55           60
Ser Pro Glu Thr Ser Pro Lys Glu Thr Pro Met Gln Pro Pro Glu Ile
65           70           75           80
Pro Ala Pro Ala His Arg Pro Pro Glu Asp Glu Gly Glu Glu Asn Glu
      85           90           95
Gly Glu Glu Asp Glu Glu Trp Glu Asp Ile Ser Glu Asp Glu Glu Glu
      100          105          110
Glu Glu Ile Glu Val Glu Glu Gly Asp Glu Glu Glu Pro Ala Gln Asp
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His Gln Ala Pro Glu Ala Ala Pro Thr
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<210> 5369

<211> 646

<212> DNA

<213> Homo sapiens

<400> 5369

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<210> 5370

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<210> 5367
<211> 549
<212> DNA
<213> Homo sapiens
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<210> 5368

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 1680
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<210> 5366

<211> 477

<212> PRT

<213> Homo sapiens

<400> 5366

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			20					25					30		
His	Asn	Phe	Cys	Arg	Ala	Cys	Ile	Gln	Leu	Ser	Trp	Glu	Lys	Ala	Arg
		35					40					45			
Gly	Lys	Lys	Gly	Arg	Arg	Lys	Arg	Lys	Gly	Ser	Phe	Pro	Cys	Pro	Glu
	50					55					60				
Cys	Arg	Glu	Met	Ser	Pro	Gln	Arg	Asn	Leu	Leu	Pro	Asn	Arg	Leu	Leu
65					70					75				80	
Thr	Lys	Val	Ala	Glu	Met	Ala	Gln	Gln	His	Pro	Gly	Leu	Gln	Lys	Gln
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Asp	Leu	Cys	Gln	Glu	His	His	Glu	Pro	Leu	Lys	Leu	Phe	Cys	Gln	Lys
			100					105					110		
Asp	Gln	Ser	Pro	Ile	Cys	Val	Val	Cys	Arg	Glu	Ser	Arg	Glu	His	Arg
		115					120					125			
Leu	His	Arg	Val	Leu	Pro	Ala	Glu	Glu	Ala	Val	Gln	Gly	Tyr	Lys	Leu
	130					135					140				
Lys	Leu	Glu	Glu	Asp	Met	Glu	Tyr	Leu	Arg	Glu	Gln	Ile	Thr	Arg	Thr
145					150					155				160	
Gly	Asn	Leu	Gln	Ala	Arg	Glu	Glu	Gln	Ser	Leu	Ala	Glu	Trp	Gln	Gly
			165					170					175		
Lys	Val	Lys	Glu	Arg	Arg	Glu	Arg	Ile	Val	Leu	Glu	Phe	Glu	Lys	Met
		180					185					190			
Asn	Leu	Tyr	Leu	Val	Glu	Glu	Glu	Gln	Arg	Leu	Leu	Gln	Ala	Leu	Glu
	195						200					205			
Thr	Glu	Glu	Glu	Glu	Thr	Ala	Ser	Arg	Leu	Arg	Glu	Ser	Val	Ala	Cys
	210				215						220				
Leu	Asp	Arg	Gln	Gly	His	Ser	Leu	Glu	Leu	Leu	Leu	Gln	Leu	Glu	
225					230				235					240	
Glu	Arg	Ser	Thr	Gln	Gly	Pro	Leu	Gln	Met	Leu	Gln	Asp	Met	Lys	Glu
			245					250				255			
Pro	Leu	Ser	Arg	Lys	Asn	Asn	Val	Ser	Val	Gln	Cys	Pro	Glu	Val	Ala
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<212> DNA

<213> Homo sapiens

<400> 5365

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<210> 5364

<211> 187

<212> PRT

<213> Homo sapiens

<400> 5364

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			20					25					30		
Pro	Gly	Leu	Tyr	Ser	Tyr	Ile	Arg	Asp	Asp	Leu	Phe	Thr	Ser	Glu	Ile
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Phe	Lys	Leu	Glu	Leu	Gln	Asn	Ala	Pro	Arg	His	Ala	Ser	Phe	Ser	Asp
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Val	Arg	Arg	Phe	Leu	Gly	Arg	Phe	Gly	Leu	Gln	Pro	His	Lys	Thr	Lys
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Glu	Arg	Asp	Lys	Ala	Leu	Arg	Val	Leu	His	Gly	Ala	Leu	Trp	Lys	Gly
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Arg	Pro	Leu	Ser	Val	Ala	Trp	Pro	Gly	Pro	Arg	Pro	Thr	Pro	Trp	Pro
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Leu	Ser	Gly	Ser	Ser	Trp	Ser	Ala	Ser	Arg	Cys	Cys	Arg	Asn	Xaa	Ala
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<210> 5362

<211> 165

<212> PRT

<213> Homo sapiens

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Trp	Ser	Arg	Thr	Pro	Asp	Leu	Met	Xaa	Ser	Thr	Arg	Leu	Gly	Leu	Pro
		115					120					125			
Asn	Cys	Trp	Asp	His	Arg	Arg	Glu	Pro	Pro	Arg	Pro	Ala	Val	Cys	Leu
	130					135					140				
Val	Phe	Lys	Pro	Ile	Asn	Glu	Pro	Val	Ser	Leu	Phe	Gly	Ile	Tyr	Asn
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<210> 5363

<211> 894

<212> DNA

<213> Homo sapiens

<400> 5363

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<213> Homo sapiens

<400> 5361

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          435          440          445
His Ser Thr Leu Glu Gln Leu Thr Glu Lys Lys Ile Lys His Leu Glu
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Gln Gly Tyr Arg Glu Arg Leu Ser Leu Leu Arg Ser Glu Val Glu Ala
465          470          475          480
Glu Arg Glu Leu Phe Trp Glu Gln Ala His Arg Gln Arg Ala Ala Leu
          485          490          495
Glu Trp Asp Val Gly Arg Leu Gln Ala Glu Glu Ala Gly Leu Arg Glu
          500          505          510
Lys Leu Thr Leu Ala Leu Lys Glu Asn Ser Arg Leu Gln Lys Glu Ile
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Val Glu Val Val Glu Lys Leu Ser Asp Ser Glu Arg Leu Ala Leu Lys
          530          535          540
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545          550          555          560
Ser Ala Glu Leu Leu Ala Gln Glu Glu Arg Phe Ala Ala Val Leu Lys
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Glu Tyr Glu Leu Lys Cys Arg Asp Leu Gln Asp Arg Asn Asp Glu Leu
          580          585          590
Gln Ala Glu Leu Glu Gly Leu Trp Ala Arg Leu Pro Lys Asn Arg His
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Ser Pro Ser Trp Ser Pro Asp Gly Arg Arg Arg Gln Leu Pro Gly Leu
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Glu Thr Glu Leu Met Met Glu Gln Val Lys Glu His Tyr Gln Asp Leu
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Arg Thr Gln Leu Glu Thr Lys Val Asn Tyr Tyr Glu Arg Glu Ile Ala
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Arg Arg Arg Glu Val Ser Val Leu Glu Gly Gln Lys Ala Asp Leu Glu
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Glu Leu His Glu Lys Ser Gln Glu Val Ile Trp Gly Leu Gln Glu Gln
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Pro Cys Cys Thr Gln Ala Leu Cys Gly Leu Ala Leu Arg His His Ser
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Leu Ser Gly Leu Gly Ala Leu Pro Ala Arg Arg Asp Leu Thr Leu Glu
          770          775          780
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<212> PRT

<213> Homo sapiens

<400> 5360

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 His Phe Ala Arg Val Asn Phe Glu Glu Phe Lys Glu Gly Phe Val Ala
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 450 455 460
 Tyr Tyr Trp Ile Thr Gly Arg Ile Asp Asp Met Leu Asn Val Ser Gly
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 500 505 510
 Glu Cys Leu Tyr Cys Phe Val Thr Leu Cys Asp Gly His Thr Phe Ser
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Ser Asp Ser Gly Leu Ser Leu Asp Ser Ser His Asn Asn Thr Ser Val
      420      425      430
Ile Lys Ser Asn Ser Ser His Ser Val Cys Asp Glu Gly Ala Ile Gly
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Tyr Cys Thr Asp His Glu Ser Ser Ser His His Asp Leu Glu Gly Ala
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Val Gly Gly Tyr Tyr Pro Glu Pro Ser Lys Leu Cys His Leu Asp Gln
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Ser Asp Ser Asp Phe His Gly Asp Leu Thr Phe Gln His Val Phe His
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Asn His Thr Tyr His Leu Gln Pro Thr Ala Pro Glu Ser Thr Ser Glu
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Ser Phe Asn Ser Met Leu Ser Arg Tyr Tyr Leu Thr Asp Leu Gln Val
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Leu Tyr His Asp Ile Phe Ser Arg Leu Arg Asp Asp Gln Gly Arg Pro
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Val Asn Pro Asn His Tyr Ala Leu Gln Cys Thr His Asp Gly Ser Ile
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<210> 5349

<211> 425

<212> DNA

<213> Homo sapiens

<400> 5349

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<210> 5348
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 <212> PRT
 <213> Homo sapiens

<400> 5348
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 Tyr Leu Leu Leu Pro Pro Pro Thr Leu Leu Gln Asp Glu Leu Leu Phe
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 Leu Gly Gly Pro Ala Ser Ser Ala Tyr Ala Leu Ser Pro Phe Ser Ala
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 Ser Gly Gly Trp Gly Arg Ala Gly His Leu His Pro Lys Gly Arg Glu
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 Leu Asp Pro Ala Ala Pro Pro Glu Gly Gln Leu Leu Arg Glu Val Arg
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 Ala Leu Gly Val Pro Phe Val Pro Arg Thr Ser Val Asp Ala Trp Leu
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 Val His Ser Val Ala Ala Gly Ser Ala Asp Glu Ala His Gly Leu Leu
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 Gly Gly Ser Gln Ala Val Gln Gly Gly Cys Gly Asp Ser Arg Ala Ala
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 Arg Ser Gly Pro Leu Asp Ala Gly Glu Glu Lys Ala Pro Ala Glu
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 Pro Thr Ala Gln Val Pro Asp Ala Gly Gly Cys Ala Ser Glu Glu Asn
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 Gly Val Leu Arg Glu Lys His Glu Ala Val Asp His Ser Ser Gln His
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 Glu Glu Asn Glu Glu Arg Val Ser Ala Gln Lys Glu Asn Ser Leu Gln
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 Gln Asn Asp Asp Asp Glu Asn Lys Ile Ala Glu Lys Pro Asp Trp Glu
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 Ala Glu Lys Thr Thr Glu Ser Arg Asn Glu Arg His Leu Asn Gly Thr
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 Asp Thr Ser Phe Ser Leu Glu Asp Leu Phe Gln Leu Leu Ser Ser Gln
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 Phe Ser Gln Ala Ile Ser Gln Asp Val Asn Leu His Glu Ala Ile Leu
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<212> DNA

<213> Homo sapiens

<400> 5347

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Lys Lys Phe Leu Asp Lys Thr Lys Asn Asn Trp Glu Asp Arg Glu Lys
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Phe Glu Lys Val Pro Gly Lys Tyr Asp Met Leu Gln Met Asp Tyr Ala
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Thr Asn Thr Gln Asp Glu Glu Glu Thr Lys Lys Glu Glu Ser Leu Lys
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Ser Pro Leu Lys Pro Glu Ser Gln Leu Asp Leu Arg Val Gln Glu Leu
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Met Ser Ser Lys Ser Ala Asn Tyr Cys Phe Ala Ser Arg Leu Lys Asn
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Thr Gly Leu Leu Leu Leu Ser Glu Val Ala Leu Gly Gln Cys Asn Glu
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Ser Thr Lys Gly Leu Gly Lys Met Ala Pro Ser Ser Ala His Phe Val
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Thr Leu Asn Gly Ser Thr Val Pro Leu Gly Pro Ala Ser Asp Thr Gly

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<212> PRT

<213> Homo sapiens

<400> 5346

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<210> 5345
 <211> 1912
 <212> DNA
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Thr Pro His Phe Ile Arg Ile Gln Asp Ala Met	Glu Val Thr Ser Thr	
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Phe Lys Leu Met Lys Thr Arg Leu Val Arg Glu Gly	Phe Asn Val Gly	
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Ile Val Val Asp Pro Leu Phe Val Leu Asp Asn Arg	Ala Gln Ser Phe	
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Arg	Gly	Met	Pro	Leu	Ala	His	Ser	Val	Leu	Ser	Ser	Gly	Ala	Arg	Val			
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Leu	Val	Val	Asp	Pro	Asp	Leu	Arg	Glu	Ser	Leu	Glu	Glu	Ile	Leu	Pro			
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Lys	Leu	Gln	Ala	Glu	Asn	Ile	Arg	Cys	Phe	Tyr	Leu	Ser	His	Thr	Ser			
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<210> 5342

<211> 690

<212> PRT

<213> Homo sapiens

<400> 5342

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		20						25					30		
Leu	Arg	Trp	Leu	Leu	Gly	Asp	Pro	Thr	Cys	Cys	Val	Leu	Leu	Gly	Leu
		35					40					45			
Ala	Met	Leu	Ala	Arg	Pro	Trp	Leu	Gly	Pro	Trp	Val	Pro	His	Gly	Leu
		50					55				60				
Ser	Leu	Ala	Ala	Ala	Ala	Leu	Ala	Leu	Thr	Leu	Leu	Pro	Ala	Arg	Leu
65					70					75				80	
Pro	Pro	Gly	Leu	Arg	Trp	Leu	Pro	Ala	Asp	Val	Ile	Phe	Leu	Ala	Lys
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<211> 2455
<212> DNA
<213> Homo sapiens

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<211> 217

<212> PRT

<213> Homo sapiens

<400> 5340

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			20					25					30		
Leu	Leu	Ser	Gly	Asp	Glu	Tyr	Asn	Gln	Asp	Phe	Asp	Ser	Thr	Asn	Phe
		35					40					45			
Glu	Glu	Ser	Gln	Asp	Glu	Asp	Asp	Ala	Leu	Asn	Glu	Ile	Val	Arg	Cys
		50				55					60				
Ile	Cys	Glu	Met	Asp	Glu	Glu	Asn	Gly	Phe	Met	Ile	Gln	Cys	Glu	Glu
65					70				75					80	
Cys	Leu	Cys	Trp	Gln	His	Ser	Val	Cys	Met	Gly	Leu	Leu	Glu	Glu	Ser
			85					90					95		
Ile	Pro	Glu	Gln	Tyr	Ile	Cys	Tyr	Ile	Cys	Arg	Asp	Pro	Pro	Gly	Gln
		100					105					110			
Arg	Trp	Ser	Ala	Lys	Tyr	Arg	Tyr	Asp	Lys	Glu	Trp	Leu	Asn	Asn	Gly
	115						120					125			
Arg	Met	Cys	Gly	Leu	Ser	Phe	Lys	Glu	Asn	Tyr	Ser	His	Leu	Asn	
	130					135				140					
Ala	Lys	Lys	Ile	Val	Ser	Thr	His	His	Leu	Leu	Ala	Asp	Val	Tyr	Gly
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Val	Thr	Glu	Val	Leu	His	Gly	Leu	Gln	Leu	Lys	Ile	Gly	Ile	Leu	Lys
			165				170					175			
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		180					185					190			
Lys	Asp	Gln	Asp	Gln	Ile	Ile	Ala	Gly	Val	Glu	Lys	Lys	Ile	Ala	Gln
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<210> 5338

<211> 139

<212> PRT

<213> Homo sapiens

<400> 5338

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			20					25					30		
Asn	Ser	Gln	Met	Lys	Ile	Val	His	Lys	Lys	Lys	Glu	Arg	Gly	His	Gly
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Tyr	Asn	Ser	Ser	Ala	Ala	Ala	Trp	Gln	Ala	Met	Gln	Asn	Gly	Gly	Lys
			50			55				60					
Asn	Lys	Asn	Phe	Pro	Asn	Asn	Gln	Ser	Trp	Asn	Ser	Ser	Leu	Ser	Gly
65					70					75				80	
Pro	Arg	Leu	Leu	Phe	Lys	Ser	Gln	Ala	Asn	Gln	Asn	Tyr	Ala	Gly	Ala
				85					90					95	
Lys	Phe	Ser	Glu	Pro	Pro	Ser	Pro	Ser	Val	Leu	Pro	Lys	Pro	Pro	Ser
			100					105					110		
His	Trp	Val	Pro	Val	Ser	Phe	Asn	Pro	Ser	Asp	Lys	Glu	Ile	Met	Thr
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<210> 5339

<211> 847

<212> DNA

<213> Homo sapiens

<400> 5339

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Glu Glu Val Glu Glu Arg Met Trp Ala Ala Ile Gln Ser Trp Asp Ile		655
	660	665
Asn Ser Arg Arg Asn Ile Asn Tyr Arg Ser Phe Glu Pro Ile Leu Arg		670
	675	680
Leu Leu Pro Gln Gly Ile Ser Pro Val Ser Gln His Trp Ala Thr Trp		685
	690	695
Ala Leu Tyr Asn Leu Val Ser Val Tyr Pro Asp Lys Tyr Cys Pro Leu		700
705	710	715
Leu Ile Lys Glu Gly Gly Met Pro Leu Leu Arg Asp Ile Ile Lys Met		720
	725	730
Ala Thr Ala Arg Gln Glu Thr Lys Glu Met Ala Arg Lys Val Ile Glu		735
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<211> 2742

<212> DNA

<213> Homo sapiens

<400> 5337

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<210> 5336

<211> 766

<212> PRT

<213> Homo sapiens

<400> 5336

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			20						25					30	
Thr	Leu	Arg	Leu	His	Pro	Asp	Ile	Phe	Leu	Pro	Ser	Glu	Ile	Cys	Asp
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<400> 5334

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 Ile Glu Gln Gly Asn Thr Lys Ala Leu Ala Val Val Tyr Gly Pro His
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 Glu Ile Arg Gly Ser Arg Ala Arg Ala Leu Pro Asp Arg Ala Leu Val
 85 90 95
 Asn Cys Gln Tyr Ser Ser Ala Thr Phe Ser Thr Gly Glu Arg Lys Arg
 100 105 110
 Arg Pro His Gly Asp Arg Lys Ser Cys Glu Met Gly Leu Gln Leu Arg
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 Gln Thr Phe Glu Ala Ala Ile Leu Thr Gln Leu His Pro Arg Ser Gln
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 Ile Asp Ile Tyr Val Gln Val Leu Gln Ala Asp Gly Gly Thr Tyr Ala
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 Ala Cys Val Asn Ala Ala Thr Leu Ala Val Leu Asp Ala Gly Ile Pro
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 Met Arg Asp Phe Val Cys Ala Cys Ser Ala Gly Phe Val Asp Gly Thr
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 Ala Leu Ala Asp Leu Ser His Val Glu Glu Ala Ala Gly Gly Pro Gln
 195 200 205
 Leu Ala Leu Ala Leu Leu Pro Ala Ser Gly Gln Ile Ala Leu Leu Glu
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 Met Asp Ala Arg Leu His Glu Asp His Leu Glu Arg Val Leu Glu Ala
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<211> 4282

<212> DNA

<213> Homo sapiens

<400> 5335

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<213> Homo sapiens

<400> 5332

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			20					25					30		
Met	Ile	Thr	Asp	Ser	Gly	Lys	Phe	Ser	Gly	Ser	Ser	Pro	Ala	Pro	Pro
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<211> 883

<212> DNA

<213> Homo sapiens

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<211> 269

<212> PRT

<213> Homo sapiens

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<210> 5330

<211> 308

<212> PRT

<213> Homo sapiens

<400> 5330

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Phe	Gln	Ile	Asp	Gly	Tyr	Val	Thr	Asp	His	Ile	Glu	Val	Val	Gln	Asp
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Thr	Val	Asp	Leu	Asn	Pro	Gln	Tyr	Tyr	Leu	Leu	Val	Asn	Arg	Gln	Ile
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Ala	Thr	Ser	Leu	Glu	His	Tyr	Lys	Phe	Ile	Val	Asp	Tyr	Cys	Glu	Lys

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 Gly Gly Thr Cys Lys Glu Ala Gly Gly Glu Tyr His Cys Ser Cys Pro
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 Tyr Arg Phe Thr Gly Arg His Cys Glu Ile Gly Lys Pro Asp Ser Cys
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 Ala Ser Gly Pro Cys His Asn Gly Gly Thr Cys Phe His Tyr Ile Gly
 565 570 575
 Lys Tyr Lys Cys Asp Cys Pro Pro Gly Phe Ser Gly Arg His Cys Glu
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 Ile Ala Pro Ser Pro Cys Phe Arg Ser Pro Cys Val Asn Gly Gly Thr
 595 600 605
 Cys Glu Asp Arg Asp Thr Asp Phe Phe Cys His Cys Gln Ala Gly Tyr
 610 615 620
 Met Gly Arg Arg Cys Gln Ala Glu Val Asp Cys Gly Pro Pro Glu Glu
 625 630 635 640
 Val Lys His Ala Thr Leu Arg Phe Asn Gly Thr Arg Leu Gly Ala Val
 645 650 655
 Ala Leu Tyr Ala Cys Asp Arg Gly Tyr Ser Leu Ser Ala Pro Ser Arg
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<211> 2582

<212> DNA

<213> Homo sapiens

<400> 5329

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Gly	Ser	Ser	Ser	Ser 100	Pro	Val	Asn	Thr	Phe 105	Gln	Thr	Val	Leu	Ile	Thr
Asp	Gly	Lys	Leu	Ser 115	Phe	Thr	Ile	Phe	Asn 120	Tyr	Glu	Ser	Ile	Val	Trp
Thr	Thr	Gly	Thr	His 130	Ala	Ser	Ser	Gly	Gly 135	Asn	Ala	Thr	Gly	Leu	Gly
Gly 145	Ile	Ala	Ala	Gln 150	Ala	Gly	Phe	Asn	Ala 155	Gly	Asp	Gly	Gln	Arg	Tyr 160
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Pro	Ala	Gly	Phe	Gly 275	Gly	Pro	Thr	Cys	Glu 280	Thr	Ala	Gln	Ser	Pro	Cys 285
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Ser 305	Ala	Val	Cys	Val 310	Cys	Gln	Ala	Gly	Tyr 315	Thr	Gly	Ala	Ala	Cys	Glu 320
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<400> 5328

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 Gly Ser Ala Gly Cys Val Leu Ala Gly Arg Leu Thr Glu Asp Pro Ala
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<213> Homo sapiens

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<211> 4231

<212> DNA

<213> Homo sapiens

<400> 5319

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Gln Ala Ala Ala His Met Met Arg Lys Thr Ser Cys Leu Gln Tyr Leu		
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Asp Ala Arg Asn Thr Pro Leu Leu Asp His Ser Ala Pro Phe Val Ala		
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180	185	190
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195	200	205
Ser Leu Gln Ile Leu Asp Leu Arg Asn Asn His Val Leu Asp Ser Gly		
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Leu Ala Tyr Ile Cys Glu Gly Leu Lys Glu Gln Arg Lys Gly Leu Val		
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<211> 544

<212> PRT

<213> Homo sapiens

<400> 5316

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			20					25					30		
Glu	Phe	Thr	Asp	Leu	Gly	His	Arg	Leu	Asp	Cys	Leu	Asp	Leu	Lys	Gly
		35					40					45			
Glu	Lys	Leu	Asp	Tyr	Lys	Thr	Cys	Glu	Ala	Leu	Glu	Glu	Val	Phe	Lys


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Ile Lys Ser Ser Asp Thr Arg Cys Cys Glu Leu Cys Lys Tyr Glu Phe
      35           40           45
Ile Met Glu Thr Lys Leu Lys Pro Leu Arg Lys Trp Glu Lys Leu Gln
      50           55           60
Met Thr Ser Ser Glu Arg Arg Lys Ile Met Cys Ser Val Thr Phe His
      65           70           75           80
Val Ile Ala Ile Thr Cys Val Val Trp Ser Leu Tyr Val Leu Ile Asp
      85           90           95
Arg Pro Ala Glu Glu Ile Lys Gln Gly Gln Ala Thr Gly Ile Leu Glu
      100          105          110
Trp Pro Phe Trp Thr Lys Leu Val Val Val Ala Ile Gly Phe Thr Arg
      115          120          125
Gly Leu Leu Phe Met Tyr Val Gln Cys Lys Val Tyr Val Gln Leu Trp
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Lys Arg Leu Lys Ala Tyr Asn Arg Val Ile Tyr Val Gln Asn Cys Pro
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 <212> DNA
 <213> Homo sapiens

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<210> 5314
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 <212> PRT
 <213> Homo sapiens

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<400> 5314
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Thr Ala Glu Arg Ser His Arg Gly Glu Gly Glu Glu Asp His Glu Ser		255
	260	265
Pro Ser Ser Gly Arg Val Pro Ala Pro Asp Thr Ser Ile Glu Glu Thr		270
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Glu Ser Asp Ala Ser Ser Asp Ser Glu Asp Val Ser Ala Val Val Ala		285
	290	295
Gln His Ser Leu Thr Gln Gln Arg Leu Leu Val Ser Asn Ala Asn Gln		300
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Thr Val Pro Asp Arg Ser Asp Arg Ser Gly Thr Asp Arg Ser Val Ala		320
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<211> 572

<212> DNA

<213> Homo sapiens

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<210> 5312

<211> 190

<212> PRT

<213> Homo sapiens

<400> 5312

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<210> 5310

<211> 359

<212> PRT

<213> Homo sapiens

<400> 5310

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Tyr	Val	Ala	Asp	Leu	Glu	Asn	Met	Val	Gln	Tyr	Arg	Arg	Asn	Glu	His
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Gly	Val	Ala	Gly	Leu	Arg	Leu	Asp	Cys	Asp	Ala	Asn	Thr	Val	Asn	Leu
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Ala	Arg	Glu	Ser	Ser	Ala	Asp	Gly	Ala	Asp	Ser	Val	Ser	Ala	Gln	Ser
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<212> DNA

<213> Homo sapiens

<400> 5309

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 <211> 112
 <212> PRT
 <213> Homo sapiens

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 Asp His His Arg Gly His Gly Pro Thr Ser Val Ile Trp Glu Thr Gly
 35 40 45
 Leu Gly Arg Gly Gly Asp Phe Pro Lys Ser Pro Ser Ile His Asp Arg
 50 55 60
 Gly Arg Ala Trp Glu Leu Gly Thr Gln Gly Ser Ser Lys Arg Ser Arg
 65 70 75 80
 Ser Leu Cys Tyr Pro Gln Ile His Lys Leu Arg Ile Thr Cys Ile His
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 Phe Pro Pro Pro Trp Thr Leu Cys Phe Glu Leu Phe Cys Leu Pro Asp
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<210> 5309
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<210> 5306

<211> 62

<212> PRT

<213> Homo sapiens

<400> 5306

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Gln	Leu	Ala	Gly	Pro	Ser	Leu	Trp	Leu	Glu	Leu	Val	Cys	Val	Tyr	Leu
			20					25				30			
Ile	Lys	Ser	His	Arg	Cys	Leu	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys
		35				40					45				
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<210> 5307

<211> 1551

<212> DNA

<213> Homo sapiens

<400> 5307

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 240
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<210> 5303
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 <212> DNA
 <213> Homo sapiens

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 Arg Arg Gly Tyr Cys Ser Arg His Leu Ser Met Arg Thr Lys Glu Met
 35 40 45
 Glu Gly Leu Ala Asp Ser Gly Pro Gly Gly Ala Gly Arg Pro Ala Ala
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 Val Ala Ala Arg Glu Gly Ser Thr Glu Phe Asp Trp Gly Asp Glu Thr
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 <211> 582
 <212> DNA
 <213> Homo sapiens

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 240
 cccagggcac tgtgaggggtg ggtgctggct gagcccctgg ggcagaagga gtggggcagg
 300

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 Ile Arg Ser Leu Arg Met Asn Gly Val Thr Leu Asp Leu Glu Glu Arg
 945 950 955 960
 Ala Lys Val Thr Ser Gly Phe Ile Ser Gly Cys Ser Gly His Cys Thr
 965 970 975
 Ser Tyr Gly Thr Asn Cys Glu Asn Gly Gly Lys Cys Leu Glu Arg Tyr
 980 985 990
 His Gly Tyr Ser Cys Asp Cys Ser Asn Thr Ala Tyr Asp Gly Thr Phe
 995 1000 1005
 Cys Asn Lys Asp Val Gly Ala Phe Phe Glu Glu Gly Met Trp Leu Arg
 1010 1015 1020
 Tyr Asn Phe Gln Ala Pro Ala Thr Asn Ala Arg Asp Ser Ser Ser Arg
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 Val Asp Asn Ala Pro Asp Gln Gln Asn Ser His Pro Asp Leu Ala Gln
 1045 1050 1055
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 1060 1065 1070
 Leu Tyr Ile Ser Ser Phe Thr Thr Asp Phe Leu Ala Val Leu Val Lys
 1075 1080 1085
 Pro Thr Gly Ser Leu Gln Ile Arg Tyr Asn Leu Gly Gly Thr Arg Glu
 1090 1095 1100
 Pro Tyr Asn Ile Asp Val Asp His Arg Asn Met Ala Asn Gly Gln Pro
 1105 1110 1115 1120
 His Ser Val Asn Ile Thr Arg His Glu Lys Thr Ile Phe Leu Lys Leu
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 Asp His Tyr Pro Ser Val Ser Tyr His Leu Pro Ser Ser Ser Asp Thr
 1140 1145 1150
 Leu Phe Asn Ser Pro Lys Ser Leu Phe Leu Gly Lys Val Ile Glu Thr
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 Gly Lys Ile Asp Gln Glu Ile His Lys Tyr Asn Thr Pro Gly Phe Thr
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 Gly Cys Leu Ser Arg Val Gln Phe Asn Gln Ile Ala Pro Leu Lys Ala
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 Glu Ser Ala Asp Ala Ala Ile Met Asn Asn Asp Pro Asn Phe Thr Glu
 1315 1320 1325
 Thr Ile Asp Glu Ser Lys Lys Glu Trp Leu Ile
 1330 1335

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 515 520 525
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 Ala Gln Arg Lys Pro Gly Ser Phe Ala Asn Val Ser Ile Asp Met Cys
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 675 680 685
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 770 775 780
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 820 825 830
 Phe Tyr Phe Lys Thr Leu Thr Pro Trp Gly Val Phe Leu Glu Asn Met
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 Gly Lys Glu Asp Phe Ile Lys Leu Glu Leu Lys Ser Ala Thr Glu Val
 850 855 860
 Ser Phe Ser Phe Asp Val Gly Asn Gly Pro Val Glu Ile Val Val Arg
 865 870 875 880
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 885 890 895
 Arg Asn Val Lys Gln Ala Ser Leu Gln Val Asp Arg Leu Pro Gln Gln
 900 905 910
 Ile Arg Lys Ala Pro Thr Glu Gly His Thr Arg Leu Glu Leu Tyr Ser

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<211> 1339

<212> PRT

<213> Homo sapiens

<400> 5302

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		20						25				30			
Ala	Trp	Thr	Ala	Pro	Ser	Thr	Ser	Gln	Lys	Cys	Asp	Glu	Pro	Leu	Val
		35					40				45				
Ser	Gly	Leu	Pro	His	Val	Ala	Phe	Ser	Ser	Ser	Ser	Ser	Ile	Ser	Gly

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 Ser Tyr Ser Pro Gly Tyr Ala Lys Ile Asn Lys Arg Gly Gly Ala Gly
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 Gly Trp Ser Pro Ser Asp Ser Asp His Tyr Gln Trp Leu Gln Val Asp
 85 90 95
 Phe Gly Asn Arg Lys Gln Ile Ser Ala Ile Ala Thr Gln Gly Arg Tyr
 100 105 110
 Ser Ser Ser Asp Trp Val Thr Gln Tyr Arg Met Leu Tyr Ser Asp Thr
 115 120 125
 Gly Arg Asn Trp Lys Pro Tyr His Gln Asp Gly Asn Ile Trp Ala Phe
 130 135 140
 Pro Gly Asn Ile Asn Ser Asp Gly Val Val Arg His Glu Leu Gln His
 145 150 155 160
 Pro Ile Ile Ala Arg Tyr Val Arg Ile Val Pro Leu Asp Trp Asn Gly
 165 170 175
 Glu Gly Arg Ile Gly Leu Arg Ile Glu Val Tyr Gly Cys Ser Tyr Trp
 180 185 190
 Ala Asp Val Ile Asn Phe Asp Gly His Val Val Leu Pro Tyr Arg Phe
 195 200 205
 Arg Asn Lys Lys Met Lys Thr Leu Lys Asp Val Ile Ala Leu Asn Phe
 210 215 220
 Lys Thr Ser Glu Ser Glu Gly Val Ile Leu His Gly Glu Gly Gln Gln
 225 230 235 240
 Gly Asp Tyr Ile Thr Leu Glu Leu Lys Lys Ala Lys Leu Val Leu Ser
 245 250 255
 Leu Asn Leu Gly Ser Asn Gln Leu Gly Pro Ile Tyr Gly His Thr Ser
 260 265 270
 Val Met Thr Gly Ser Leu Leu Asp Asp His His Trp His Ser Val Val
 275 280 285
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 Gln His Phe Arg Thr Asn Gly Glu Phe Asp Tyr Leu Asp Leu Asp Tyr
 305 310 315 320
 Glu Ile Thr Phe Gly Gly Ile Pro Phe Ser Gly Lys Pro Ser Ser Ser
 325 330 335
 Ser Arg Lys Asn Phe Lys Gly Cys Met Glu Ser Ile Asn Tyr Asn Gly
 340 345 350
 Val Asn Ile Thr Asp Leu Ala Arg Arg Lys Lys Leu Glu Pro Ser Asn
 355 360 365
 Val Gly Asn Leu Ser Phe Ser Cys Val Glu Pro Tyr Thr Val Pro Val
 370 375 380
 Phe Phe Asn Ala Thr Ser Tyr Leu Glu Val Pro Gly Arg Leu Asn Gln
 385 390 395 400
 Asp Leu Phe Ser Val Ser Phe Gln Phe Arg Thr Trp Asn Pro Asn Gly
 405 410 415
 Leu Leu Val Phe Ser His Phe Ala Asp Asn Leu Gly Asn Val Glu Ile
 420 425 430
 Asp Leu Thr Glu Ser Lys Val Gly Val His Ile Asn Ile Thr Gln Thr
 435 440 445
 Lys Met Ser Gln Ile Asp Ile Ser Ser Gly Ser Gly Leu Asn Asp Gly
 450 455 460
 Gln Trp His Glu Val Arg Phe Leu Ala Lys Glu Asn Phe Ala Ile Leu
 465 470 475 480
 Thr Ile Asp Gly Asp Glu Ala Ser Ala Val Arg Thr Asn Ser Pro Leu

485 490 495
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 500 505 510
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 515 520 525
 Met Gln Leu Ile Gln Val Asp Asp Gln Leu Val Asn Leu Tyr Glu Val
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 580 585 590
 Tyr Ser Gly Ala Thr Cys His Asn Ser Ile Tyr Glu Pro Ser Cys Glu
 595 600 605
 Ala Tyr Lys His Leu Gly Gln Thr Ser Asn Tyr Tyr Trp Ile Asp Pro
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 Asp Gly Ser Gly Pro Leu Gly Pro Leu Lys Val Tyr Cys Asn Met Thr
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 785 790 795 800
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 865 870 875 880
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 His Gly Tyr Ser Cys Asp Cys Ser Asn Thr Ala Tyr Asp Gly Thr Phe
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 Cys Asn Lys Asp Val Gly Ala Phe Phe Glu Glu Gly Met Trp Leu Arg
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 Tyr Asn Phe Gln Ala Pro Ala Thr Asn Ala Arg Asp Ser Ser Ser Arg
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 1090 1095 1100
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 Asp His Tyr Pro Ser Val Ser Tyr His Leu Pro Ser Ser Ser Asp Thr
 1140 1145 1150
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 1235 1240 1245
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 1265 1270 1275 1280
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 <212> DNA
 <213> Homo sapiens

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 tggcagcccg tgagggcagc acggagtttg actgggggtga tgagacgtcg agggacagtg
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 gagccagca gtgtggcgac tcgtggagac tcac
 334

<210> 5304
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 5304
 Met Trp Ser Ala His Pro Ala Glu Tyr Glu Arg Ser Ser Thr Ala Ser
 1 5 10 15
 Arg Gly Ala Arg Leu Gly Ser Arg Asp Gly Cys Met Lys Glu Ser Gln
 20 25 30
 Arg Arg Gly Tyr Cys Ser Arg His Leu Ser Met Arg Thr Lys Glu Met
 35 40 45
 Glu Gly Leu Ala Asp Ser Gly Pro Gly Gly Ala Gly Arg Pro Ala Ala
 50 55 60
 Val Ala Ala Arg Glu Gly Ser Thr Glu Phe Asp Trp Gly Asp Glu Thr
 65 70 75 80
 Ser Arg Asp Ser Gly Gly Gln Gln Cys Gly Asp Ser Trp Arg Leu
 85 90 95

<210> 5305
 <211> 582
 <212> DNA
 <213> Homo sapiens

<400> 5305
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 120
 ctgtttagg cactggctag ggaggggcag gcctccttcc tgcccctcga gacactcttg
 180
 ggagatgcat tttccgtctg gctcacaggg ggaggggtgag gctttgtacc ccagcccctg
 240
 cccaggccac tgtgaggggtg ggtgctggct gagcccctgg ggcagaagga gtggggcagg
 300

cgggggtcttt gttctcggtt cccacagcag agccaggtga gggggggcct gccaggacta
 360
 gacagaagtg gggcggcctg aaccctgctt ccagccatgg ccagggggcca cggaacccgg
 420
 caggggtgtc tgaagccgcc ctgtcagctg gccgggtccaa gcctgtgggt ggagctgggt
 480
 tgtgtttatc taataaagtc ccacaggtgc ctcaaaaaaa aaaaaaaaaa aaaaaaaaaa
 540
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa
 582

<210> 5306

<211> 62

<212> PRT

<213> Homo sapiens

<400> 5306

Met	Ala	Arg	Gly	His	Gly	Thr	Arg	Gln	Gly	Cys	Leu	Lys	Pro	Pro	Cys
1			5					10					15		
Gln	Leu	Ala	Gly	Pro	Ser	Leu	Trp	Leu	Glu	Leu	Val	Cys	Val	Tyr	Leu
			20					25					30		
Ile	Lys	Ser	His	Arg	Cys	Leu	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys
			35				40					45			
Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys
	50						55					60			

<210> 5307

<211> 1551

<212> DNA

<213> Homo sapiens

<400> 5307

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 120
 cattctgtct cccagccttt cttctctctt tgtgtgtctc cagcacttcc ttcttttcta
 180
 acatggcctg gagagagtct ctctctcctt gtctctgtct cttaataata gtttttaacg
 240
 tggacatctc ttccttggtg cagtgggttt taaatactga gaagaaccaa gtcagggttt
 300
 ttaaagcaga ctaaaagcat gaaattgctt tcagaagaat gtatatcatc gggaaaagtt
 360
 cgggggcaga gtgggggaat caggctttat tcaaaagaaa cagttgaaaa catgggactt
 420
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 480
 tggaattttt tttttaagaa acttttttgt gtttttttta attttaggtc acttattagt
 540
 gaaacctcat tttagatctg acattggtag atagatggat ttaggcaaat atgatgcgtt
 600
 tgtggggaat ccacgtggtt gacgttagaa cctcccttct gcagactgtt gcctgtcatc
 660

taagcgaatt ggaaatgctg agcttccata agtcagctga gttttaaagg taaacgttat
 720
 ggctgaagta gtaaagcacc tgaccacaaa acctcttgta aaaacagccc tgagtaggta
 780
 tttccagggc tccacaaagt tgcttatggg aatcctgagc tgcttttcac catctcaaga
 840
 agcctaagaa gttatatatt taatcaggta gacaaaacag ttcaaagcat aagggtccatg
 900
 gtggtggaaa atggatgcaa gtgattctaa gtttgtggat ttgtggatag cagagggatc
 960
 gggacctctt ggaggaaccc tgggtaccaa gctcccaggc ccttcctcta tcatggatgc
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 1080
 ggccatggcc tcgatgatgg tctccacagg tctttccacc tctgtgagtc caagtcaggt
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 caatcagcaa ggacctatct ctgccctggg tcagctcttc agaaccaacc ccagcatct
 1200
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 1320
 caacttctct atgcatctgt gtgagcagat gatcattgta ttacctttta tcggtagtaa
 1380
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 1440
 gtttaaaata aactgaatgt atttaatggg ccatttatat gttcttttat gtaacatgta
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<210> 5308

<211> 112

<212> PRT

<213> Homo sapiens

<400> 5308

Met	Leu	Gly	Val	Gly	Ser	Glu	Glu	Leu	Thr	Gln	Gly	Arg	Asp	Gly	Ser
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Leu	Leu	Ile	Asp	Leu	Thr	Trp	Thr	His	Arg	Gly	Gly	Lys	Thr	Cys	Gly
		20						25					30		
Asp	His	His	Arg	Gly	His	Gly	Pro	Thr	Ser	Val	Ile	Trp	Glu	Thr	Gly
		35					40					45			
Leu	Gly	Arg	Gly	Gly	Asp	Phe	Pro	Lys	Ser	Pro	Ser	Ile	His	Asp	Arg
	50					55					60				
Gly	Arg	Ala	Trp	Glu	Leu	Gly	Thr	Gln	Gly	Ser	Ser	Lys	Arg	Ser	Arg
65					70				75					80	
Ser	Leu	Cys	Tyr	Pro	Gln	Ile	His	Lys	Leu	Arg	Ile	Thr	Cys	Ile	His
				85				90					95		
Phe	Pro	Pro	Pro	Trp	Thr	Leu	Cys	Phe	Glu	Leu	Phe	Cys	Leu	Pro	Asp
			100					105					110		

<210> 5309

<211> 2078

<212> DNA

<213> Homo sapiens

<400> 5309

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120
tccacccgca acgtactccg ggtcggcctt gcgctcgggg cctgagaggg gcggcggcgg
180
ggtcaggggc cgcacaaaga atgaaccagc agtggagag aaaatactgt aagctggctg
240
actgctgggtg aagaaaatgc tttatttttg tggcaggcat ctgtgggatc tgtaatagaa
300
atgatggctg gctgtgggtga aattgatcat tcaataaaca tgcttcctac aaacaggaaa
360
gcgaacgagt cctgttctaa tactgcacct tctttaaccg tccctgaatg tgccatttgt
420
ctgcaaacat gtgttcaccc agtcagtctg ccctgtaagc acgttttctg ctatctatgt
480
gtaaaaggag cttcatggct tggaaagcgg tgtgctcttt gtcgacaaga aattcccag
540
gatttccttg acaagccaac cttgttgtca ccagaagaac tcaaggcagc aagtagagga
600
aatgggtgaat atgcatggta ttatgaagga agaaatgggt ggtggcagta cgatgagcgc
660
actagtagag agctggaaga tgctttttcc aaaggtaaaa agaactga aatgttaatt
720
gctggctttc tgtatgtcgc tgatcttgaa aacatgggtc aatataggag aaatgaacat
780
ggacgtcgca ggaagattaa gcgagatata atagatatac caaagaaggg agtagctgga
840
cttaggctag actgtgatgc taataccgta aacctagcaa gagagagctc tgctgacgga
900
gcggacagtg tatcagcaca gagtggagct tctgttcagc ccctagtgtc ttctgtaagg
960
cccctaacat cagtagatgg tcagttaaca agccctgcaa caccatcccc tgatgcaagc
1020
acttctctgg aagactcttt tgctcattta caactcagtg gagacaacac agctgaaagg
1080
agtcataggg gagaaggaga agaagatcat gaatcaccat cttcaggcag ggtaccagca
1140
ccagacacct ccattgaaga aactgaatca gatgccagta gtgatagtga ggatgtatct
1200
gcagttgttg cacagcactc cttgacccaa cagagacttt tggtttctaa tgcaaaccag
1260
acagtacccg atcgatcaga tcgatcggga actgatcgat cagtagcagg ggggtggaaca
1320
gtgagtgtca gtgtcagatc tagaaggcct gatggacagt gcacagtaac tgaagtttaa
1380
ataaaaatgt cttcagctcc atgctcaagg ttgaaagggg tacctgtaaa tttctgcca
1440
cataacatta tactcatccc tagtagtgca ttttgggagt tggggtggga aggggtatgg
1500

gaaggataga ctcataatta aaatgtctaa catgtctctg ttgagaaatt tatttaattg
 1560
 aaggaacttg ggtgttaata gttgagagct gtttagtaat aaccagttt tcttgaggc
 1620
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 1680
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 1740
 gcataagacc attactaaaa tttggcacct gtgagatgtt tgatattatg aacaggaaac
 1800
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 1860
 tttatagtaa agttattgaa atggaaatga aaacagccag taacttatgt ttcagaatgt
 1920
 ttgtaacaca cttcatgggtg ttcccatagg ctttgcgtgc tagtcttata gtttgagggt
 1980
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 2040
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 2078

<210> 5310

<211> 359

<212> PRT

<213> Homo sapiens

<400> 5310

Met	Met	Ala	Gly	Cys	Gly	Glu	Ile	Asp	His	Ser	Ile	Asn	Met	Leu	Pro
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Thr	Asn	Arg	Lys	Ala	Asn	Glu	Ser	Cys	Ser	Asn	Thr	Ala	Pro	Ser	Leu
		20						25					30		
Thr	Val	Pro	Glu	Cys	Ala	Ile	Cys	Leu	Gln	Thr	Cys	Val	His	Pro	Val
		35					40					45			
Ser	Leu	Pro	Cys	Lys	His	Val	Phe	Cys	Tyr	Leu	Cys	Val	Lys	Gly	Ala
		50				55					60				
Ser	Trp	Leu	Gly	Lys	Arg	Cys	Ala	Leu	Cys	Arg	Gln	Glu	Ile	Pro	Glu
65					70					75				80	
Asp	Phe	Leu	Asp	Lys	Pro	Thr	Leu	Leu	Ser	Pro	Glu	Glu	Leu	Lys	Ala
			85						90					95	
Ala	Ser	Arg	Gly	Asn	Gly	Glu	Tyr	Ala	Trp	Tyr	Tyr	Glu	Gly	Arg	Asn
			100					105					110		
Gly	Trp	Trp	Gln	Tyr	Asp	Glu	Arg	Thr	Ser	Arg	Glu	Leu	Glu	Asp	Ala
		115					120					125			
Phe	Ser	Lys	Gly	Lys	Lys	Asn	Thr	Glu	Met	Leu	Ile	Ala	Gly	Phe	Leu
		130				135					140				
Tyr	Val	Ala	Asp	Leu	Glu	Asn	Met	Val	Gln	Tyr	Arg	Arg	Asn	Glu	His
145					150					155				160	
Gly	Arg	Arg	Arg	Lys	Ile	Lys	Arg	Asp	Ile	Ile	Asp	Ile	Pro	Lys	Lys
			165					170					175		
Gly	Val	Ala	Gly	Leu	Arg	Leu	Asp	Cys	Asp	Ala	Asn	Thr	Val	Asn	Leu
		180					185						190		
Ala	Arg	Glu	Ser	Ser	Ala	Asp	Gly	Ala	Asp	Ser	Val	Ser	Ala	Gln	Ser
		195				200						205			
Gly	Ala	Ser	Val	Gln	Pro	Leu	Val	Ser	Ser	Val	Arg	Pro	Leu	Thr	Ser

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      210              215              220
Val Asp Gly Gln Leu Thr Ser Pro Ala Thr Pro Ser Pro Asp Ala Ser
225              230              235              240
Thr Ser Leu Glu Asp Ser Phe Ala His Leu Gln Leu Ser Gly Asp Asn
      245              250              255
Thr Ala Glu Arg Ser His Arg Gly Glu Gly Glu Glu Asp His Glu Ser
      260              265              270
Pro Ser Ser Gly Arg Val Pro Ala Pro Asp Thr Ser Ile Glu Glu Thr
      275              280              285
Glu Ser Asp Ala Ser Ser Asp Ser Glu Asp Val Ser Ala Val Val Ala
      290              295              300
Gln His Ser Leu Thr Gln Gln Arg Leu Leu Val Ser Asn Ala Asn Gln
305              310              315              320
Thr Val Pro Asp Arg Ser Asp Arg Ser Gly Thr Asp Arg Ser Val Ala
      325              330              335
Gly Gly Gly Thr Val Ser Val Ser Val Arg Ser Arg Arg Pro Asp Gly
      340              345              350
Gln Cys Thr Val Thr Glu Val
      355

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<210> 5311
 <211> 572
 <212> DNA
 <213> Homo sapiens

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<400> 5311
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ctccacttcg tgcaccaggc ctacctgcag cagtggatca agagctccga cacgcgctgc
120
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180
gagaagttgc agatgacgtc cagcgagcgc aggaagatca tgtgctcagt gacattccac
240
gtcattgcc aacatgtgt ggtctgggtc ttgtatgtgc tcattgaccg tcctgctgag
300
gagatcaagc aggggcaggc aacaggaatc ctagaatggc ccttttggac taaattggtg
360
gttgtggcca tcggcttcac cagaggactt ctttttatgt atgttcagt taaagtgtat
420
gtgcaattgt ggaagagact caaggcctat aatagagtga tctatgttca aaactgtcca
480
gaaacaagca aaaagaatat ttttgaaaaa tctccactaa cagagcccaa ctttgaaaat
540
aaacatggat atggaatctg tcattccgac ac
572

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<210> 5312
 <211> 190
 <212> PRT
 <213> Homo sapiens

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<400> 5312
Cys His Cys Glu Gly Asp Asp Glu Ser Pro Leu Ile Thr Pro Cys His

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      1           5           10           15
Cys Thr Gly Ser Leu His Phe Val His Gln Ala Tyr Leu Gln Gln Trp
      20           25           30
Ile Lys Ser Ser Asp Thr Arg Cys Cys Glu Leu Cys Lys Tyr Glu Phe
      35           40           45
Ile Met Glu Thr Lys Leu Lys Pro Leu Arg Lys Trp Glu Lys Leu Gln
      50           55           60
Met Thr Ser Ser Glu Arg Arg Lys Ile Met Cys Ser Val Thr Phe His
      65           70           75           80
Val Ile Ala Ile Thr Cys Val Val Trp Ser Leu Tyr Val Leu Ile Asp
      85           90           95
Arg Pro Ala Glu Glu Ile Lys Gln Gly Gln Ala Thr Gly Ile Leu Glu
      100          105          110
Trp Pro Phe Trp Thr Lys Leu Val Val Val Ala Ile Gly Phe Thr Arg
      115          120          125
Gly Leu Leu Phe Met Tyr Val Gln Cys Lys Val Tyr Val Gln Leu Trp
      130          135          140
Lys Arg Leu Lys Ala Tyr Asn Arg Val Ile Tyr Val Gln Asn Cys Pro
      145          150          155          160
Glu Thr Ser Lys Lys Asn Ile Phe Glu Lys Ser Pro Leu Thr Glu Pro
      165          170          175
Asn Phe Glu Asn Lys His Gly Tyr Gly Ile Cys His Ser Asp
      180          185          190

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<210> 5313
 <211> 322
 <212> DNA
 <213> Homo sapiens

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<400> 5313
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aaaggcggtca tgcgagtagg catcctggcg aaaggcctcc tcctgcgtgg ggacaggaac
120
gtgcgcctcg ctctgctctg ctccgagaag cccacgcaca gcctgctgcg gaggatcgcc
180
cagcagctgc cccggcaaca caggcaattc cacgttggtg gcgactggcc tgtgcatatg
240
gaggtgttca gtgacctggc cctggacact cctgctaaca ggacacacac atactctctt
300
acacacatac atgtccacac ac
322

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<210> 5314
 <211> 107
 <212> PRT
 <213> Homo sapiens

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<400> 5314
Arg Gly Arg Arg Glu Glu Glu Gly Asp Lys Arg Ser Val Ala Pro Gln
1           5           10           15
Thr Arg Val Leu Lys Gly Val Met Arg Val Gly Ile Leu Ala Lys Gly
20          25          30
Leu Leu Leu Arg Gly Asp Arg Asn Val Arg Leu Ala Leu Leu Cys Ser

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<210> 5315
<211> 2298
<212> DNA
<213> Homo sapiens
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4484

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 ctggcctcca ccaagctcac gtgcgagggc gcggtggcgg tggcggagtt catcgtgag
 1320
 agccccgcc tcctgagact ggaccttcgg gagaacgaga tcaagacagg cgggctcatg
 1380
 gcactgtcgt tggccctcaa ggtgaaccac tctactgtgc gcctggacct cgacctgaa
 1440
 cccaagaaag aggcggtgaa gagcttcac gagacgcaga aggcgctgct ggccgagatc
 1500
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 1560
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 1620
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 1860
 cctgagccgc ccccgggggc tgaggtcaag gggggcagct gcggcctgga gcacgaactg
 1920
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 1980
 gggcaggaga cactgtgaca ctttaggtga ggccaggccc gggggccaca gactcggga
 2040
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 2100
 ctttttcgg tcggtctgag atgagctgag gccagagcca tgagaatctg ctcaccttc
 2160
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 2220
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 2280
 aagcattct atttatga
 2298

<210> 5316

<211> 544

<212> PRT

<213> Homo sapiens

<400> 5316

Gln	Asn	Val	Thr	Val	Asp	Glu	Val	Ile	Gly	Ala	Tyr	Lys	Gln	Ala	Cys
1				5				10					15		
Gln	Lys	Leu	Asn	Cys	Arg	Gln	Ile	Pro	Lys	Leu	Leu	Arg	Gln	Leu	Gln
			20					25					30		
Glu	Phe	Thr	Asp	Leu	Gly	His	Arg	Leu	Asp	Cys	Leu	Asp	Leu	Lys	Gly
			35				40				45				
Glu	Lys	Leu	Asp	Tyr	Lys	Thr	Cys	Glu	Ala	Leu	Glu	Glu	Val	Phe	Lys

50 55 60
 Arg Leu Gln Phe Lys Val Val Asp Leu Glu Gln Thr Asn Leu Asp Glu
 65 70 75 80
 Asp Gly Ala Ser Ala Leu Phe Asp Met Ile Glu Tyr Tyr Glu Ser Ala
 85 90 95
 Thr His Leu Asn Ile Ser Phe Asn Lys His Ile Gly Thr Arg Gly Trp
 100 105 110
 Gln Ala Ala Ala His Met Met Arg Lys Thr Ser Cys Leu Gln Tyr Leu
 115 120 125
 Asp Ala Arg Asn Thr Pro Leu Asp His Ser Ala Pro Phe Val Ala
 130 135 140
 Arg Ala Leu Arg Ile Arg Ser Ser Leu Ala Val Leu His Leu Glu Asn
 145 150 155 160
 Ala Ser Leu Ser Gly Arg Pro Leu Met Leu Leu Ala Thr Ala Leu Lys
 165 170 175
 Met Asn Met Asn Leu Arg Glu Leu Tyr Leu Ala Asp Asn Lys Leu Asn
 180 185 190
 Gly Leu Gln Asp Ser Ala Gln Leu Gly Asn Leu Leu Lys Phe Asn Cys
 195 200 205
 Ser Leu Gln Ile Leu Asp Leu Arg Asn Asn His Val Leu Asp Ser Gly
 210 215 220
 Leu Ala Tyr Ile Cys Glu Gly Leu Lys Glu Gln Arg Lys Gly Leu Val
 225 230 235 240
 Thr Leu Val Leu Trp Asn Asn Gln Leu Thr His Thr Gly Met Ala Phe
 245 250 255
 Leu Gly Met Thr Leu Ser His Thr Gln Ser Leu Glu Thr Leu Asn Leu
 260 265 270
 Gly His Asn Pro Ile Gly Asn Glu Gly Val Arg His Leu Lys Asn Gly
 275 280 285
 Leu Ile Ser Asn Arg Ser Val Leu Arg Leu Gly Leu Ala Ser Thr Lys
 290 295 300
 Leu Thr Cys Glu Gly Ala Val Ala Val Ala Glu Phe Ile Ala Glu Ser
 305 310 315 320
 Pro Arg Leu Leu Arg Leu Asp Leu Arg Glu Asn Glu Ile Lys Thr Gly
 325 330 335
 Gly Leu Met Ala Leu Ser Leu Ala Leu Lys Val Asn His Ser Leu Leu
 340 345 350
 Arg Leu Asp Leu Asp Arg Glu Pro Lys Lys Glu Ala Val Lys Ser Phe
 355 360 365
 Ile Glu Thr Gln Lys Ala Leu Leu Ala Glu Ile Gln Asn Gly Cys Lys
 370 375 380
 Arg Asn Leu Val Leu Ala Arg Glu Arg Glu Glu Lys Glu Gln Pro Pro
 385 390 395 400
 Gln Leu Ser Ala Ser Met Pro Glu Thr Thr Ala Thr Glu Pro Gln Pro
 405 410 415
 Asp Asp Glu Pro Ala Ala Gly Val Gln Asn Gly Ala Pro Ser Pro Ala
 420 425 430
 Pro Ser Pro Asp Ser Asp Ser Asp Ser Asp Ser Asp Gly Glu Glu Glu
 435 440 445
 Glu Glu Glu Glu Gly Glu Arg Asp Glu Thr Pro Ser Gly Ala Ile Asp
 450 455 460
 Thr Arg Asp Thr Gly Ser Ser Glu Pro Gln Pro Pro Pro Glu Pro Pro
 465 470 475 480
 Arg Ser Gly Pro Pro Leu Pro Asn Gly Leu Lys Pro Glu Phe Ala Leu

<400> 5318
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Arg Pro Cys Val Ser Gly Thr Val Pro Ser Ser Cys Gln Leu Gly Gly

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120
tgagaagcta acaggggtcaa ctcccgcggc cagctacgag gaggaggagt tgccccctga
180
ccctagcgag gagacgctca ccatagaagc ccgattccag cctctgctcc cggagaccat
240
gaccaagagc aaagatggct tcctaggggt ctcccgctc gccctgtccg gcctccgaaa
300
ctggacagcc gccgcctcac caagtgcagt gtttgccacc cgccacttcc agcccttctt
360
tcccccgcca ggccaggagc tgggtgagcc ctggtggatc atccccagtg agctgagcat
420
gttcaactggc tacctgtcca acaaccgctt ctatccaccg ccgcccagg gcaaggaggt
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660
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<211> 234

<212> PRT

<213> Homo sapiens

<400> 5326

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<211> 694

<212> PRT

<213> Homo sapiens

<400> 5328

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Arg	Cys	Val	Val	Ala	Ala	Phe	Trp	Ala	Asp	Val	Asp	Asn	Arg	Arg	Ala
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<211> 308

<212> PRT

<213> Homo sapiens

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 <213> Homo sapiens

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			20					25					30		
Met	Ile	Thr	Asp	Ser	Gly	Lys	Phe	Ser	Gly	Ser	Ser	Pro	Ala	Pro	Pro
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 Arg Pro His Gly Asp Arg Lys Ser Cys Glu Met Gly Leu Gln Leu Arg
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 Met Arg Asp Phe Val Cys Ala Cys Ser Ala Gly Phe Val Asp Gly Thr
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<212> DNA

<213> Homo sapiens

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<211> 766

<212> PRT

<213> Homo sapiens

<400> 5336

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Glu Glu Val Glu Glu Arg Met Trp Ala Ala Ile Gln Ser Trp Asp Ile		655
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<210> 5337

<211> 2742

<212> DNA

<213> Homo sapiens

<400> 5337

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<212> PRT

<213> Homo sapiens

<400> 5338

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			20					25					30		
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			85					90						95	
Lys	Phe	Ser	Glu	Pro	Pro	Ser	Pro	Ser	Val	Leu	Pro	Lys	Pro	Pro	Ser
			100					105					110		
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<210> 5339

<211> 847

<212> DNA

<213> Homo sapiens

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<211> 217

<212> PRT

<213> Homo sapiens

<400> 5340

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			50			55					60				
Ile	Cys	Glu	Met	Asp	Glu	Glu	Asn	Gly	Phe	Met	Ile	Gln	Cys	Glu	Glu
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Cys	Leu	Cys	Trp	Gln	His	Ser	Val	Cys	Met	Gly	Leu	Leu	Glu	Glu	Ser
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Arg	Trp	Ser	Ala	Lys	Tyr	Arg	Tyr	Asp	Lys	Glu	Trp	Leu	Asn	Asn	Gly
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<210> 5341

<211> 2455

<212> DNA

<213> Homo sapiens

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<211> 690

<212> PRT

<213> Homo sapiens

<400> 5342

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 Ser Leu Ala Ala Ala Ala Leu Ala Leu Thr Leu Leu Pro Ala Arg Leu
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 Pro Pro Gly Leu Arg Trp Leu Pro Ala Asp Val Ile Phe Leu Ala Lys
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 Ile Leu His Leu Gly Leu Lys Ile Arg Gly Cys Leu Ser Arg Gln Pro

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Gln	Gly	Phe	Cys	Ile	Pro	Val	Gly	Leu	Gly									

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 580 585 590
 Lys Val Gly Met Ala Ala Val Gln Leu Ala Pro Gly Gln Thr Phe Asp
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 Gly Glu Lys Leu Tyr Gln His Val Arg Ala Trp Leu Pro Ala Tyr Ala
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 Thr Pro His Phe Ile Arg Ile Gln Asp Ala Met Glu Val Thr Ser Thr
 625 630 635 640
 Phe Lys Leu Met Lys Thr Arg Leu Val Arg Glu Gly Phe Asn Val Gly
 645 650 655
 Ile Val Val Asp Pro Leu Phe Val Leu Asp Asn Arg Ala Gln Ser Phe
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 Lys Leu
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<210> 5343

<211> 752

<212> DNA

<213> Homo sapiens

<400> 5343

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 <211> 124
 <212> PRT
 <213> Homo sapiens

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 Ser Leu Ser Gly Arg Val Ile Val Ala Gly Gly Leu Gly Asn Gln Pro
 50 55 60
 Thr Val Leu Glu Thr Ala Glu Ala Phe His Pro Gly Lys Asn Lys Trp
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 Glu Ile Leu Pro Ala Met Pro Thr Pro Arg Cys Ala Cys Ser Ser Ile
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 <211> 1912
 <212> DNA
 <213> Homo sapiens

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<210> 5346

<211> 534

<212> PRT

<213> Homo sapiens

<400> 5346

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			20					25					30		
Ser	Val	Lys	Ala	Leu	Leu	Leu	Lys	Gly	Lys	Ala	Pro	Val	Asp	Pro	Glu
		35					40					45			
Cys	Thr	Ala	Lys	Val	Gly	Lys	Ala	His	Val	Tyr	Cys	Glu	Gly	Asn	Asp

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Val Tyr Asp Val Met Leu Asn Gln Thr Asn Leu Gln Phe Asn Asn Asn		
65	70	75
Lys Tyr Tyr Leu Ile Gln Leu Leu Glu Asp Asp Ala Gln Arg Asn Phe		80
	85	90
Ser Val Trp Met Arg Trp Gly Arg Val Gly Lys Met Gly Gln His Ser		95
	100	105
Leu Val Ala Cys Ser Gly Asn Leu Asn Lys Ala Lys Glu Ile Phe Gln		110
	115	120
Lys Lys Phe Leu Asp Lys Thr Lys Asn Asn Trp Glu Asp Arg Glu Lys		125
	130	135
Phe Glu Lys Val Pro Gly Lys Tyr Asp Met Leu Gln Met Asp Tyr Ala		140
145	150	155
Thr Asn Thr Gln Asp Glu Glu Glu Thr Lys Lys Glu Glu Ser Leu Lys		160
	165	170
Ser Pro Leu Lys Pro Glu Ser Gln Leu Asp Leu Arg Val Gln Glu Leu		175
	180	185
Ile Lys Leu Ile Cys Asn Val Gln Ala Met Glu Glu Met Met Met Glu		190
	195	200
Met Lys Tyr Asn Thr Lys Lys Ala Pro Leu Gly Lys Leu Thr Val Ala		205
	210	215
Gln Ile Lys Ala Gly Tyr Gln Ser Leu Lys Lys Ile Glu Asp Cys Ile		220
225	230	235
Arg Ala Gly Gln His Gly Arg Ala Leu Met Glu Ala Cys Asn Glu Phe		240
	245	250
Tyr Thr Arg Ile Pro His Asp Phe Gly Leu Arg Thr Pro Pro Leu Ile		255
	260	265
Arg Thr Gln Lys Glu Leu Ser Glu Lys Ile Gln Leu Leu Glu Ala Leu		270
	275	280
Gly Asp Ile Glu Ile Ala Ile Lys Leu Val Lys Thr Glu Leu Gln Ser		285
	290	295
Pro Glu His Pro Leu Asp Gln His Tyr Arg Asn Leu His Cys Ala Leu		300
305	310	315
Arg Pro Leu Asp His Glu Ser Tyr Glu Phe Lys Val Ile Ser Gln Tyr		320
	325	330
Leu Gln Ser Thr His Ala Pro Thr His Ser Asp Tyr Thr Met Thr Leu		335
	340	345
Leu Asp Leu Phe Glu Val Glu Lys Asp Gly Glu Lys Glu Ala Phe Arg		350
	355	360
Glu Asp Leu His Asn Arg Met Leu Leu Trp His Gly Ser Arg Met Ser		365
	370	375
Asn Trp Val Gly Ile Leu Ser His Gly Leu Arg Ile Ala Pro Pro Glu		380
385	390	395
Ala Pro Ile Thr Gly Tyr Met Phe Gly Lys Gly Ile Tyr Phe Ala Asp		400
	405	410
Met Ser Ser Lys Ser Ala Asn Tyr Cys Phe Ala Ser Arg Leu Lys Asn		415
	420	425
Thr Gly Leu Leu Leu Ser Glu Val Ala Leu Gly Gln Cys Asn Glu		430
	435	440
Leu Leu Glu Ala Asn Pro Lys Ala Glu Gly Leu Leu Gln Gly Lys His		445
	450	455
Ser Thr Lys Gly Leu Gly Lys Met Ala Pro Ser Ser Ala His Phe Val		460
465	470	475
Thr Leu Asn Gly Ser Thr Val Pro Leu Gly Pro Ala Ser Asp Thr Gly		480

				485						490					495				
Ile	Leu	Asn	Pro	Asp	Gly	Tyr	Thr	Leu	Asn	Tyr	Asn	Glu	Tyr	Ile	Val				
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Tyr	Asn	Pro	Asn	Gln	Val	Arg	Met	Arg	Tyr	Leu	Leu	Lys	Val	Gln	Phe				
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<210> 5347<211> 2893

<212> DNA

<213> Homo sapiens

<400> 5347

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 <211> 694
 <212> PRT
 <213> Homo sapiens

<400> 5348
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 Tyr Leu Leu Leu Pro Pro Pro Thr Leu Leu Gln Asp Glu Leu Leu Phe
 35 40 45
 Leu Gly Gly Pro Ala Ser Ser Ala Tyr Ala Leu Ser Pro Phe Ser Ala
 50 55 60
 Ser Gly Gly Trp Gly Arg Ala Gly His Leu His Pro Lys Gly Arg Glu
 65 70 75 80
 Leu Asp Pro Ala Ala Pro Pro Glu Gly Gln Leu Leu Arg Glu Val Arg
 85 90 95
 Ala Leu Gly Val Pro Phe Val Pro Arg Thr Ser Val Asp Ala Trp Leu
 100 105 110
 Val His Ser Val Ala Ala Gly Ser Ala Asp Glu Ala His Gly Leu Leu
 115 120 125
 Gly Ala Ala Ala Ala Ser Ser Thr Gly Gly Ala Gly Ala Ser Val Asp
 130 135 140
 Gly Gly Ser Gln Ala Val Gln Gly Gly Cys Gly Asp Ser Arg Ala Ala
 145 150 155 160
 Arg Ser Gly Pro Leu Asp Ala Gly Glu Glu Glu Lys Ala Pro Ala Glu
 165 170 175
 Pro Thr Ala Gln Val Pro Asp Ala Gly Gly Cys Ala Ser Glu Glu Asn
 180 185 190
 Gly Val Leu Arg Glu Lys His Glu Ala Val Asp His Ser Ser Gln His
 195 200 205
 Glu Glu Asn Glu Glu Arg Val Ser Ala Gln Lys Glu Asn Ser Leu Gln
 210 215 220
 Gln Asn Asp Asp Asp Glu Asn Lys Ile Ala Glu Lys Pro Asp Trp Glu
 225 230 235 240
 Ala Glu Lys Thr Thr Glu Ser Arg Asn Glu Arg His Leu Asn Gly Thr
 245 250 255
 Asp Thr Ser Phe Ser Leu Glu Asp Leu Phe Gln Leu Leu Ser Ser Gln
 260 265 270
 Pro Glu Asn Ser Leu Glu Gly Ile Ser Leu Gly Asp Ile Pro Leu Pro
 275 280 285
 Gly Ser Ile Ser Asp Gly Met Asn Ser Ser Ala His Tyr His Val Asn
 290 295 300
 Phe Ser Gln Ala Ile Ser Gln Asp Val Asn Leu His Glu Ala Ile Leu
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 325 330 335
 Gln Ser Gln Glu Pro Phe Leu Gln Leu Asn Ser His Thr Thr Asn Pro

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Asp Ile Asn Ile Phe Asp Glu Ile Asn Leu Met Ser Leu Ala Thr Glu
      385      390      395      400
Asp Asn Phe Asp Pro Ile Asp Val Ser Gln Leu Phe Asp Glu Ser Asp
      405      410      415
Ser Asp Ser Gly Leu Ser Leu Asp Ser Ser His Asn Asn Thr Ser Val
      420      425      430
Ile Lys Ser Asn Ser Ser His Ser Val Cys Asp Glu Gly Ala Ile Gly
      435      440      445
Tyr Cys Thr Asp His Glu Ser Ser His His Asp Leu Glu Gly Ala
      450      455      460
Val Gly Gly Tyr Tyr Pro Glu Pro Ser Lys Leu Cys His Leu Asp Gln
      465      470      475      480
Ser Asp Ser Asp Phe His Gly Asp Leu Thr Phe Gln His Val Phe His
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Asn His Thr Tyr His Leu Gln Pro Thr Ala Pro Glu Ser Thr Ser Glu
      500      505      510
Pro Phe Pro Trp Pro Gly Lys Ser Gln Lys Ile Arg Ser Arg Tyr Leu
      515      520      525
Glu Asp Thr Asp Arg Asn Leu Ser Arg Asp Glu Gln Arg Ala Lys Ala
      530      535      540
Leu His Ile Pro Phe Ser Val Asp Glu Ile Val Gly Met Pro Val Asp
      545      550      555      560
Ser Phe Asn Ser Met Leu Ser Arg Tyr Tyr Leu Thr Asp Leu Gln Val
      565      570      575Leu Ile Arg
Asp Ile Arg Arg Arg Gly Lys Asn Lys Val Ala Ala
      580      585      590
Gln Asn Cys Arg Lys Arg Lys Leu Asp Ile Ile Leu Asn Leu Glu Asp
      595      600      605
Asp Val Cys Asn Leu Gln Ala Lys Lys Glu Thr Leu Lys Arg Glu Gln
      610      615      620
Ala Gln Cys Asn Lys Ala Ile Asn Ile Met Lys Gln Lys Leu His Asp
      625      630      635      640
Leu Tyr His Asp Ile Phe Ser Arg Leu Arg Asp Asp Gln Gly Arg Pro
      645      650      655
Val Asn Pro Asn His Tyr Ala Leu Gln Cys Thr His Asp Gly Ser Ile
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Gln Lys Gly Lys Arg Lys
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<210> 5349

<211> 425

<212> DNA

<213> Homo sapiens

<400> 5349

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<210> 5350

<211> 134

<212> PRT

<213> Homo sapiens

<400> 5350

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Val	Thr	Ala	Cys	His	Ser	Ser	Pro	Leu	Pro	Cys	Gly	Cys	Gln	Asp	Asn
			20					25					30		
Leu	Gly	Lys	His	His	Thr	Ser	Arg	Glu	Pro	Gln	Ala	Gln	Pro	Lys	Pro
			35				40					45			
His	Lys	Val	Ser	Ser	Gln	Glu	Gly	Glu	Gly	Arg	Ile	Pro	Leu	Pro	Gly
	50				55					60					
Lys	Ala	Glu	Val	Arg	Glu	Ala	Gly	Gln	Pro	Ile	Pro	Val	Ser	Leu	Leu
65				70				75						80	
Leu	Leu	Ser	Pro	Lys	Lys	Ala	Leu	Thr	Leu	Leu	Ala	Thr	Ala	Gln	Gly
			85					90						95	
Gly	His	Glu	Gly	Leu	Gly	Arg	Leu	Leu	Trp	Gln	Ser	Gly	Pro	Leu	Gln
			100				105						110		
Pro	Arg	Pro	Glu	Lys	Lys	Arg	Thr	Pro	Lys	Ser	Phe	Trp	Leu	Pro	Val
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Ser	Ser	Ala	Phe	Thr	Arg										
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<210> 5351

<211> 343

<212> DNA

<213> Homo sapiens

<400> 5351

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 240

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<210> 5352
 <211> 112
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Gln Asp Ala Leu Ser Lys Ser Leu Gln Gln Asn Leu Pro Ser Arg Ser
 50 55 60
 Val Ser Lys Pro Ser Leu Phe Ser Ser Val Gln Leu Tyr Arg Gln Ser
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<210> 5353
 <211> 4217<212> DNA
 <213> Homo sapiens

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<211> 605

<212> PRT

<213> Homo sapiens

<400> 5354

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Cys	Ser	Leu	Leu	Ile	Thr	Thr	Asp	Ala	Phe	Tyr	Arg	Gly	Glu	Lys	Leu
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Val Tyr Gly Asn His Glu Arg Phe Glu Thr Thr Tyr Ser Lys Lys Phe		
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Pro Gly Tyr Tyr Val Thr Gly Asp Gly Cys Gln Arg Asp Gln Asp Gly		
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Tyr Tyr Trp Ile Thr Gly Arg Ile Asp Asp Met Leu Asn Val Ser Gly		
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Ala Val Ala Glu Ala Ala Val Val Gly His Pro His Pro Val Lys Gly		
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Glu Cys Leu Tyr Cys Phe Val Thr Leu Cys Asp Gly His Thr Phe Ser		
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Pro Ile Ala Thr Pro Asp Tyr Ile Gln Asn Ala Pro Gly Leu Pro Lys		
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Thr Arg Ser Gly Lys Ile Met Arg Arg Val Leu Arg Lys Ile Ala Gln		
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<210> 5355

<211> 1596

<212> DNA

<213> Homo sapiens

<400> 5355

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<211> 245

<212> PRT

<213> Homo sapiens

<400> 5356

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<211> 1722

<212> DNA

<213> Homo sapiens

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<211> 321

<212> PRT

<213> Homo sapiens

<400> 5358

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Val	Leu	Val	Leu	Leu	Cys	Gly	Pro	Pro	Pro	Met	Val	Gln	Leu	Ala	Cys
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His	Pro	Asn	Leu	Asp	Lys	Leu	Gly	Tyr	Ser	Gln	Lys	Met	Arg	Phe	Thr
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<211> 5003
<212> DNA
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<211> 1406

<212> PRT

<213> Homo sapiens

<400> 5360

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 Gly Phe Leu Asp Arg Gln Glu Leu Thr Gln Leu Cys Leu Lys Leu His
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 Leu Glu Gln Gln Leu Pro Val Leu Leu Gln Thr Leu Leu Gly Asn Asp
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 His Phe Ala Arg Val Asn Phe Glu Glu Phe Lys Glu Gly Phe Val Ala
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 Val Leu Ser Ser Asn Ala Gly Val Arg Pro Ser Asp Glu Asp Ser Ser
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 Ser Leu Glu Ser Ala Ala Ser Ser Ala Ile Pro Pro Lys Tyr Val Asn
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 Gly Ser Lys Trp Tyr Gly Arg Arg Ser Arg Pro Glu Leu Cys Asp Ala
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 Ala Thr Glu Ala Arg Arg Val Pro Glu Gln Gln Thr Gln Ala Ser Leu
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 Lys Ser His Leu Trp Arg Ser Ala Ser Leu Glu Ser Val Glu Ser Pro
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 Phe Glu Ala Gln Gly Gln Leu Gln Thr Trp Asp Ser Glu Asp Phe Gly
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 Ser Pro Gln Lys Ser Cys Ser Pro Ser Phe Asp Thr Pro Glu Ser Gln
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 Ile Arg Gly Val Trp Glu Glu Leu Gly Val Gly Ser Ser Gly His Leu
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 Leu Glu Lys Glu Glu Leu Glu Asp Leu Phe Asn Lys Leu Asp Gln Asp
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 <211> 1080
 <212> DNA
 <213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 5362

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<211> 894

<212> DNA

<213> Homo sapiens

<400> 5363

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<211> 187

<212> PRT

<213> Homo sapiens

<400> 5364

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Pro	Gly	Leu	Tyr	Ser	Tyr	Ile	Arg	Asp	Asp	Leu	Phe	Thr	Ser	Glu	Ile
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Phe	Lys	Leu	Glu	Leu	Gln	Asn	Ala	Pro	Arg	His	Ala	Ser	Phe	Ser	Asp
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Val	Arg	Arg	Phe	Leu	Gly	Arg	Phe	Gly	Leu	Gln	Pro	His	Lys	Thr	Lys
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Leu	Phe	Gly	Gln	Pro	Pro	Cys	Ala	Phe	Val	Thr	Phe	Arg	Ser	Ala	Ala
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Glu	Arg	Asp	Lys	Ala	Leu	Arg	Val	Leu	His	Gly	Ala	Leu	Trp	Lys	Gly
		100					105					110			
Arg	Pro	Leu	Ser	Val	Ala	Trp	Pro	Gly	Pro	Arg	Pro	Thr	Pro	Trp	Pro
		115				120						125			
Gly	Gly	Gly	Xaa	Gln	Glu	Gly	Glu	Ser	Glu	Pro	Pro	Val	Thr	Arg	Xaa
	130				135					140					
Gly	Arg	Arg	Gly	Asp	Pro	Ser	Met	Asp	Ser	Ala	Leu	Xaa	Leu	Ser	Ser
145				150					155					160	
Leu	Ser	Gly	Ser	Ser	Trp	Ser	Ala	Ser	Arg	Cys	Cys	Arg	Asn	Xaa	Ala
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<210> 5365

<211> 1824

<212> DNA

<213> Homo sapiens

<400> 5365

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<210> 5366

<211> 477

<212> PRT

<213> Homo sapiens

<400> 5366

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Cys	Arg	Glu	Met	Ser	Pro	Gln	Arg	Asn	Leu	Leu	Pro	Asn	Arg	Leu	Leu
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Thr	Lys	Val	Ala	Glu	Met	Ala	Gln	Gln	His	Pro	Gly	Leu	Gln	Lys	Gln
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Asp	Leu	Cys	Gln	Glu	His	His	Glu	Pro	Leu	Lys	Leu	Phe	Cys	Gln	Lys
			100					105					110		
Asp	Gln	Ser	Pro	Ile	Cys	Val	Val	Cys	Arg	Glu	Ser	Arg	Glu	His	Arg
	115						120					125			
Leu	His	Arg	Val	Leu	Pro	Ala	Glu	Glu	Ala	Val	Gln	Gly	Tyr	Lys	Leu
	130					135					140				
Lys	Leu	Glu	Glu	Asp	Met	Glu	Tyr	Leu	Arg	Glu	Gln	Ile	Thr	Arg	Thr
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Lys	Val	Lys	Glu	Arg	Arg	Glu	Arg	Ile	Val	Leu	Glu	Phe	Glu	Lys	Met
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Thr	Glu	Glu	Glu	Glu	Thr	Ala	Ser	Arg	Leu	Arg	Glu	Ser	Val	Ala	Cys
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Pro	Leu	Ser	Arg	Lys	Asn	Asn	Val	Ser	Val	Gln	Cys	Pro	Glu	Val	Ala
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Tyr Pro Tyr Leu Leu Leu Tyr Glu Ser Arg Gln Arg Arg Tyr Leu Gly		
305	310	315
Ser Ser Pro Glu Gly Ser Gly Phe Cys Ser Lys Asp Arg Phe Val Ala		
	325	330
Tyr Pro Cys Ala Val Gly Gln Thr Ala Phe Ser Ser Gly Arg His Tyr		
	340	345
Trp Glu Val Gly Met Asn Ile Thr Gly Asp Ala Leu Trp Ala Leu Gly		
	355	360
Val Cys Arg Asp Asn Val Ser Arg Lys Asp Arg Val Leu Lys Cys Pro		
	370	375
Glu Asn Gly Phe Trp Val Val Gln Leu Ser Lys Gly Thr Lys Tyr Leu		
	385	390
Ser Thr Phe Ser Ala Leu Thr Pro Val Met Leu Met Glu Pro Pro Ser		
	405	410
His Met Gly Ile Phe Leu Asp Phe Glu Ala Gly Glu Val Ser Phe Tyr		
	420	425
Ser Val Ser Asp Gly Ser His Leu His Thr Tyr Ser Gln Ala Thr Phe		
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Pro Gly Pro Leu Gln Pro Phe Phe Cys Leu Gly Ala Pro Lys Ser Gly		
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Gln Met Val Ile Ser Thr Val Thr Met Trp Val Lys Gly		
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<210> 5367

<211> 549

<212> DNA

<213> Homo sapiens

<400> 5367

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<210> 5368

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 35 40 45
 Thr Lys Glu Gly Ala Ala Ser Pro Ala Pro Glu Thr Pro Gln Pro Thr
 50 55 60
 Ser Pro Glu Thr Ser Pro Lys Glu Thr Pro Met Gln Pro Pro Glu Ile
 65 70 75 80
 Pro Ala Pro Ala His Arg Pro Pro Glu Asp Glu Gly Glu Glu Asn Glu
 85 90 95
 Gly Glu Glu Asp Glu Glu Trp Glu Asp Ile Ser Glu Asp Glu Glu Glu
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 His Gln Ala Pro Glu Ala Ala Pro Thr
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<210> 5369
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 <212> DNA
 <213> Homo sapiens

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<211> 148
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 Ile Tyr Glu Leu Thr Val Leu Lys Asp Pro Tyr Thr Gly Met His Lys
 35 40 45
 Gly Gly Arg Pro Ala Pro Ser Pro Leu Ser Pro Ser Leu Arg Leu Pro
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 Pro His Leu Pro Ala Ser Ser Leu Pro His His His Pro Ser Ser Ala
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 His Leu Pro Pro Leu Pro Ala Ser Ala Gly Ala Ser Val Leu Thr Pro
 85 90 95
 Ser Leu Pro Pro Thr Pro Pro Pro Leu Ser Gly Gly Ala Ala Asp Arg
 100 105 110
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<210> 5372

<211> 368

<212> PRT

<213> Homo sapiens

<400> 5372

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			20					25					30		
Val	Val	Gly	Phe	Gly	Gly	Ile	His	Ser	Thr	Pro	Ser	Thr	Val	Leu	Ser
		35				40						45			
Asp	Gln	Ala	Lys	Tyr	Leu	Asn	Pro	Leu	Leu	Gly	Glu	Trp	Lys	His	Phe
50					55					60					
Thr	Ala	Ser	Leu	Ala	Pro	Arg	Met	Ser	Asn	Gln	Gly	Ile	Ala	Val	Leu
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			85					90					95		
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Xaa	Pro	Asp	Pro	Val	Pro	Ala	Ala	Gly	Ala	Arg	Arg	Pro	Val	Xaa	Val
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Gln	Trp	Ser	Ser	Val	Cys	Pro	Leu	Pro	Ala	Gly	His	Gly	Glu	Pro	Gly
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Asp	Cys	Trp	Glu	Glu	Gly	Pro	Gln	Leu	Asp	Asn	Ser	Ile	Ser	Gly	Leu
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<211> 4221

<212> DNA

<213> Homo sapiens

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<210> 5374
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 <212> PRT
 <213> Homo sapiens

<400> 5374
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 Ser Val His Lys Val Phe Ala Ser Met Leu Gly Glu Asn Glu Asp Asp
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 Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Thr
 100 105 110
 Pro Glu Gln Pro Thr Ala Gly Asp Val Phe Val Leu Glu Met Val Leu
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 Ala Arg Gly Glu Arg Glu Glu Ala Ile Leu Met Cys Met Glu Ile Ile
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 Arg Gln Ala Pro Leu Ala Tyr Glu Pro Phe Ser Thr Leu Ala Met Ile
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 Tyr Glu Asp Gln Gly Asp Met Glu Lys Ser Leu Gln Phe Glu Leu Ile
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 Ala Ala His Leu Asn Pro Ser Asp Thr Glu Glu Trp Val Arg Leu Ala
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 Thr Lys Ala Leu Lys Tyr Glu Pro Thr Asn Val Arg Tyr Leu Trp Glu
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 Arg Ser Ser Leu Tyr Glu Gln Met Gly Asp His Lys Met Ala Met Asp
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 Gly Tyr Arg Arg Ile Leu Asn Leu Leu Ser Pro Ser Asp Gly Glu Arg
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 Glu Asn Lys Ala Pro Glu Asn Val Thr Cys Thr Ile Pro Asp Gly Val
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 Pro Glu Asp Met Gly Asp Leu Tyr Leu Asp Val Ala Glu Ala Phe Leu
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 Cys Ser Glu Arg Tyr Asn Leu Ala Val Val Trp Leu Arg His Ala Glu
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 Ser Thr Leu Gln Gln Leu Gly Gln Pro Glu Lys Ala Leu Glu Ala
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 Phe Cys Leu Arg Leu Met Leu Lys Asn Pro Glu Asn His Ala Leu Cys
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 Val Leu Asn Gly His Asn Ala Phe Val Ser Gly Ser Phe Lys His Ala
 740 745 750
 Leu Gly Gln Tyr Val Gln Ala Phe Arg Thr His Pro Asp Glu Pro Leu
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 Tyr Ser Phe Cys Ile Gly Leu Thr Phe Ile His Met Ala Ser Gln Lys

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      805              810              815
Leu Gly Arg Gly Leu His Gln Leu Gly Leu Ile His Leu Ala Ile His
      820              825              830
Tyr Tyr Gln Lys Ala Leu Glu Leu Pro Pro Leu Val Val Glu Gly Ile
      835              840              845
Glu Leu Asp Gln Leu Asp Leu Arg Arg Asp Ile Ala Tyr Asn Leu Ser
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<210> 5375
 <211> 526
 <212> DNA
 <213> Homo sapiens

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360
catgtcccca ttttacagga gtggtgatta aggctcaaag gatggagggtg atggatcaaa
420
gtcgtctgcc aagtgggtgc agcattgggt ctcagaccga ggcccgtcta cacagtgtctg
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526

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<210> 5376
 <211> 112
 <212> PRT
 <213> Homo sapiens

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<400> 5376
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Leu Gln Arg Ala Ala Ala Ser Ser Glu Ser Pro Val Ala Arg Thr Trp
      35      40      45
Val Gln Leu Lys Ser Ile Ser Leu Phe Ala Phe Ser Glu Ala Ser Pro

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50		55		60	
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Cys His Arg Pro Arg Thr Ile Ser Ile Phe Asn Pro Arg Asn His Thr					
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Gly Asp Gly Trp Gly Met Phe Met Ser Pro Phe Tyr Arg Ser Gly Asp					
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<210> 5377

<211> 1452

<212> DNA

<213> Homo sapiens

<400> 5377

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<210> 5378

<211> 374

<212> PRT

<213> Homo sapiens

<400> 5378

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Asp	Glu	Asn	Gly	Ala	Lys	Ile	Pro	Asp	Glu	Phe	Asp	Asn	Asp	Pro	Ile
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	195						200					205			
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Leu	Ile	Asp	Ser	Val	Asp	Pro	His	Gly	Phe	Ile	Ser	Tyr	Arg	Leu	Phe
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Arg	Asp	Ala	Thr	Arg	Tyr	Met	Asp	Gly	His	His	Val	Lys	Asp	Ile	Ser
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Cys	Leu	Asn	Arg	Asp	Pro	Ala	Arg	Val	Val	Val	Val	Asp	Cys	Lys	Lys
		260						265					270		
Glu	Ala	Phe	Arg	Leu	Gln	Pro	Tyr	Asn	Gly	Val	Ala	Leu	Arg	Pro	Trp
	275					280						285			
Asp	Gly	Asn	Ser	Asp	Asp	Arg	Val	Leu	Leu	Asp	Leu	Ser	Ala	Phe	Leu

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Lys Thr Ile Ala Leu Asn Gly Val Glu Asp Val Arg Thr Val Leu Glu				
305		310		315
His Tyr Ala Leu Glu Asp Asp Pro Leu Ala Ala Phe Lys Gln Arg Gln				
	325		330	335
Ser Arg Leu Glu Gln Glu Glu Gln Gln Arg Leu Ala Glu Leu Ser Lys				
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<210> 5379

<211> 3213

<212> DNA

<213> Homo sapiens

<400> 5379

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<210> 5380

<211> 903

<212> PRT

<213> Homo sapiens

<400> 5380

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Ser	Cys	Ala	Pro	Ala	Leu	Leu	Gly	Ser	Gly	Cys	Gly	Ser	Gly	Glu	Ser
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Cys	Asp	Arg	Gly	Cys	Leu	Ala	Ala	Ile	Leu	Ala	Ser	Thr	Ser	Ala	Thr
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Gln	Ala	Arg	Met	Val	Leu	Arg	Cys	Cys	Ser	Glu	Phe	Ile	Glu	Ala	His
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Gly	Val	Val	Asp	Gly	Ile	Tyr	Arg	Leu	Ser	Gly	Val	Ser	Ser	Asn	Ile
			85					90						95	
Gln	Arg	Leu	Arg	His	Glu	Phe	Asp	Ser	Glu	Arg	Ile	Pro	Glu	Leu	Ser
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Asn	Leu	Leu	Arg	Ser	Met	Glu	Leu	Glu	Ser	Val	Gly	Met	Gly	Gly	Ala
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Ala	Pro	Ala	Ser	Pro	Ala	Glu	Arg	Arg	Lys	Gly	Glu	Arg	Gly	Glu	Lys
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Thr	Arg	Ala	Pro	Pro	Gln	Pro	Ser	Ala	Trp	Leu	Asp	Asp	Gly	Asp	Glu
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Ala	Thr	Pro	Thr	Pro	Ala	Leu	Ser	Pro	Gly	Arg	Ser	Leu	Arg	Pro	His
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Leu	Ile	Pro	Leu	Leu	Leu	Arg	Gly	Ala	Glu	Ala	Pro	Leu	Thr	Asp	Ala
			485						490					495	
Cys	Gln	Gln	Glu	Met	Cys	Ser	Lys	Leu	Arg	Gly	Ala	Gln	Gly	Pro	Leu
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Ala	Arg	Leu	Met	Ala	Leu	Ala	Leu	Ala	Glu	Arg	Ala	Gln	Gln	Val	Ala
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Glu	Gln	Gln	Ser	Gln	Gln	Glu	Cys	Gly	Gly	Thr	Pro	Pro	Ala	Ser	Gln
	530					535						540			
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545					550					555					560
Gly	Thr	Ser	Gly	Ser	Gly	Pro	Pro	Pro	Asn	Ser	Leu	Ala	His	Pro	Gly
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Ser	Pro	Phe	Arg	Ser	Met	Pro	Pro	Asp	Arg	Leu	Asn	Ala	Ser	Tyr
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Met	Leu	Gly	Gln	Ser	Pro	Pro	Leu	His	Arg	Ser	Pro	Asp	Phe	Leu
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				755					760					765
Ser	Ala	Pro	Gln	His	Pro	Ala	Arg	Arg	Pro	Thr	Pro	Pro	Glu	Pro
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Tyr	Val	Asn	Leu	Ala	Leu	Gly	Pro	Arg	Gly	Pro	Ser	Pro	Ala	Ser
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Ser	Ser	Ser	Ser	Pro	Pro	Ala	His	Pro	Arg	Ser	Arg	Ser	Asp	Pro
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Pro	Pro	Val	Pro	Arg	Leu	Pro	Gln	Lys	Gln	Arg	Ala	Pro	Trp	Gly
				820					825					830
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Leu	Leu	Tyr	Arg	Ala	Ala	Pro	Pro	Ala	Tyr	Gly	Arg	Gly	Gly	Glu
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His	Arg	Gly	Ser	Leu	Tyr	Arg	Asn	Gly	Gly	Gln	Arg	Gly	Glu	Gly
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Gly	Pro	Pro	Pro	Pro	Tyr	Pro	Thr	Pro	Ser	Trp	Ser	Leu	His	Ser
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<210> 5381

<211> 1576

<212> DNA

<213> Homo sapiens

<400> 5381

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480

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<210> 5382

<211> 223

<212> PRT

<213> Homo sapiens

<400> 5382

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Ile	Ser	Gln	Ala	Trp	Pro	Gly	Met	Ala	Arg	Thr	Ile	Tyr	Gly	Asp	His
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Gln	Arg	Phe	Val	Asp	Ala	Tyr	Phe	Lys	Ala	Tyr	Pro	Gly	Tyr	Tyr	Phe
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Thr	Gly	Asp	Gly	Ala	Tyr	Arg	Thr	Glu	Gly	Gly	Tyr	Tyr	Gln	Ile	Thr

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Gly	Arg	Met	Asp	Asp	Val	Ile	Asn	Ile	Ser	Gly	His	Arg	Leu	Gly	Thr
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Ala	Glu	Ile	Glu	Asp	Ala	Ile	Ala	Asp	His	Pro	Ala	Val	Pro	Glu	Ser
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Ala	Val	Ile	Gly	Tyr	Pro	His	Asp	Ile	Lys	Gly	Glu	Ala	Ala	Phe	Ala
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Phe	Ile	Val	Val	Lys	Asp	Ser	Ala	Gly	Asp	Ser	Asp	Val	Val	Val	Gln
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Glu	Leu	Lys	Ser	Met	Val	Ala	Thr	Lys	Ile	Ala	Lys	Tyr	Ala	Val	Pro
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Asp	Glu	Ile	Leu	Val	Lys	Arg	Leu	Pro	Lys	Thr	Arg	Ser	Gly	Lys	
			165					170					175		
Val	Met	Arg	Arg	Leu	Leu	Arg	Lys	Ile	Ile	Thr	Ser	Glu	Ala	Gln	Glu
			180					185					190		
Leu	Gly	Asp	Thr	Thr	Thr	Leu	Glu	Asp	Pro	Ser	Ile	Ile	Ala	Glu	Ile
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<210> 5383

<211> 2027

<212> DNA

<213> Homo sapiens

<400> 5383

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<210> 5384

<211> 508

<212> PRT

<213> Homo sapiens

<400> 5384

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 35 40 45
 Leu Phe Ile Pro Ser Thr Glu Asn Glu Glu Gln Arg Leu Ala Ser Ala

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65      70      75      80
Thr Asn Val Trp Ile Asn Val His Asp Ile Phe Tyr Pro Phe Pro Gln
      85      90      95
Ser Glu Gly Glu Asp Glu Leu Cys Phe Leu Arg Ala Asn Glu Cys Lys
      100      105      110
Thr Gly Phe Cys His Leu Tyr Lys Val Thr Ala Val Leu Lys Ser Gln
      115      120      125
Gly Tyr Asp Trp Ser Glu Pro Phe Ser Pro Gly Glu Gly Glu Gln Ser
      130      135      140
Leu Thr Asn Ala Ile Trp Val Asn Glu Glu Thr Lys Leu Val Tyr Phe
145      150      155      160
Gln Gly Thr Lys Asp Thr Pro Leu Glu His His Leu Tyr Val Val Ser
      165      170      175
Tyr Glu Ala Ala Gly Glu Ile Val Arg Leu Thr Thr Pro Gly Phe Ser
      180      185      190
His Ser Cys Ser Met Ser Gln Asn Phe Asp Met Phe Val Ser His Tyr
      195      200      205
Ser Ser Val Ser Thr Pro Pro Cys Val His Val Tyr Lys Leu Ser Gly
      210      215      220
Pro Asp Asp Asp Pro Leu His Lys Gln Pro Arg Phe Trp Ala Ser Met
225      230      235      240
Met Glu Ala Ala Lys Ile Phe His Phe His Thr Arg Ser Asp Val Arg
      245      250      255
Leu Tyr Gly Met Ile Tyr Lys Pro His Ala Leu Gln Pro Gly Lys Lys
      260      265      270
His Pro Thr Val Leu Phe Val Tyr Gly Gly Pro Gln Val Gln Leu Val
      275      280      285
Asn Asn Ser Phe Lys Gly Ile Lys Tyr Leu Arg Leu Asn Thr Leu Ala
      290      295      300
Ser Leu Gly Tyr Ala Val Val Val Ile Asp Gly Arg Gly Ser Cys Gln
305      310      315      320
Arg Gly Leu Arg Phe Glu Gly Ala Leu Lys Asn Gln Met Gly Gln Val
      325      330      335
Glu Ile Glu Asp Gln Val Glu Gly Leu Gln Phe Val Ala Glu Lys Tyr
      340      345      350
Gly Phe Ile Asp Leu Ser Arg Val Ala Ile His Gly Trp Ser Tyr Gly
      355      360      365
Gly Phe Leu Ser Leu Met Gly Leu Ile His Lys Pro Gln Val Phe Lys
      370      375      380
Val Ala Ile Ala Gly Ala Pro Val Thr Val Trp Met Ala Tyr Asp Thr
385      390      395      400
Gly Tyr Thr Glu Arg Tyr Met Asp Val Pro Glu Asn Asn Gln His Gly
      405      410      415
Tyr Glu Ala Gly Ser Val Ala Leu His Val Glu Lys Leu Pro Asn Glu
      420      425      430
Pro Asn Arg Leu Leu Ile Leu His Gly Phe Leu Asp Glu Asn Val His
      435      440      445
Phe Phe His Thr Asn Phe Leu Val Ser Gln Leu Ile Arg Ala Gly Lys
      450      455      460
Pro Tyr Gln Leu Gln Val Ala Leu Pro Pro Val Ser Pro Gln Ile Tyr
465      470      475      480
Pro Asn Glu Arg His Ser Ile Arg Cys Pro Glu Ser Gly Glu His Tyr

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<210> 5385
<211> 314
<212> DNA
<213> Homo sapiens

<400> 5385
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180
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<210> 5386
<211> 100
<212> PRT
<213> Homo sapiens

<400> 5386
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35 40 45
Ala Gly Trp Leu Ala Arg Leu Gly Gln Pro Gly Leu Leu Gly Pro Tyr
50 55 60
Ala Ala Pro Thr Phe His Phe Leu Glu Met His Pro His Leu Gln Glu
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<210> 5387
<211> 375
<212> DNA
<213> Homo sapiens

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<210> 5388

<211> 125

<212> PRT

<213> Homo sapiens

<400> 5388

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Phe	Thr	Trp	Cys	Phe	Cys	Phe	Ser	Met	Thr	Leu	Ile	Ile	Leu	Ile	Val
	35					40					45				
Glu	Leu	Cys	Gly	Leu	Gln	Ala	Arg	Phe	Pro	Leu	Ser	Trp	Arg	Asn	Phe
	50				55				60						
Pro	Ile	Thr	Phe	Ala	Cys	Tyr	Ala	Ala	Leu	Phe	Cys	Leu	Ser	Ala	Ser
65				70				75					80		
Ile	Ile	Tyr	Pro	Thr	Thr	Tyr	Val	Gln	Phe	Leu	Ser	His	Gly	Arg	Ser
		85				90						95			
Arg	Asp	His	Ala	Ile	Ala	Ala	Thr	Phe	Phe	Ser	Cys	Ile	Ala	Cys	Val
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<210> 5389

<211> 1711

<212> DNA

<213> Homo sapiens

<400> 5389

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<210> 5390

<211> 118

<212> PRT

<213> Homo sapiens

<400> 5390

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	35		40		45	
Thr	Asn	Ala	Gln	Thr	Lys	Glu
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<212> PRT

<213> Homo sapiens

<400> 5394

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<212> PRT

<213> Homo sapiens

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Leu	Arg	Ile	Ala	Trp	Pro	Pro	Pro	Thr	Glu	Leu	Gly	Ser	Ser	Gly	Ser
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Ala	Leu	Glu	Glu	Gly	Ile	Lys	Met	Ser	Lys	Pro	Lys	Trp	Pro	Pro	Glu
	545					550					555				560
Asp	Glu	Ile	Ser	Lys	Pro	Glu	Val	Pro	Glu	Asp	Val	Asp	Leu	Asp	Leu
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Lys	Lys	Leu	Arg	Arg	Ser	Ser	Ser	Leu	Lys	Glu	Arg	Ser	Arg	Pro	Phe
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Thr	Val	Ala	Ala	Ser	Phe	Gln	Ser	Thr	Ser	Val	Lys	Ser	Pro	Lys	Thr
			595					600					605		
Val	Ser	Pro	Pro	Ile	Arg	Lys	Gly	Trp	Ser	Met	Ser	Glu	Gln	Ser	Glu
	610					615						620			
Glu	Ser	Val	Gly	Gly	Arg	Val	Ala	Glu	Arg	Lys	Gln	Val	Glu	Asn	Ala
	625					630					635				640
Lys	Ala	Ser	Lys	Lys	Asn	Gly	Asn	Val	Gly	Lys	Thr	Thr	Trp	Gln	Asn
			645						650					655	
Lys	Glu	Ser	Lys	Gly	Glu	Thr	Gly	Lys	Arg	Ser	Lys	Glu	Gly	His	Ser
			660					665					670		
Leu	Glu	Met	Glu	Asn	Glu	Asn	Leu	Val	Glu	Asn	Gly	Ala	Asp	Ser	Asp
			675				680					685			
Glu	Asp	Asp	Asn	Ser	Phe	Leu	Lys	Gln	Gln	Ser	Pro	Gln	Glu	Pro	Lys
	690					695					700				
Ser	Leu	Asn	Trp	Ser	Ser	Phe	Val	Asp	Asn	Thr	Phe	Ala	Glu	Glu	Phe
	705					710					715				720
Thr	Thr	Gln	Asn	Gln	Lys	Ser	Gln	Asp	Val	Glu	Leu	Trp	Glu	Gly	Glu
			725						730					735	
Val	Val	Lys	Glu	Leu	Ser	Val	Glu	Glu	Gln	Ile	Lys	Arg	Asn	Arg	Tyr
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<210> 5397

<211> 561

<212> DNA

<213> Homo sapiens

<400> 5397

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420

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<210> 5398

<211> 154

<212> PRT

<213> Homo sapiens

<400> 5398

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Asp	Ala	Ile	His	Ser	Ala	Gly	Thr	Tyr	Ala	His	Asp	Gln	Leu	Ser	Gln
		20					25					30			
Thr	Ser	Ile	Pro	Ile	Ser	Pro	Pro	Leu	Thr	Pro	Gln	Asp	Ala	Asn	Glu
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Arg	Val	Ser	Leu	Gly	Leu	Pro	Arg	Trp	Leu	Cys	Pro	Pro	Phe	Cys	Leu
65				70				75						80	
Gly	Gly	Ser	Leu	Arg	Leu	Gly	Arg	Ala	Gln	Arg	Glu	Gly	Asp	Pro	Glu
			85				90						95		
Gly	Leu	Ala	Asp	Ser	Gly	Pro	Pro	Cys	Glu	Leu	Arg	Phe	Glu	Glu	Glu
		100					105					110			
Ser	Arg	Pro	Pro	Arg	Val	Val	Gly	Glu	Ser	Thr	Gly	Arg	Lys	Ala	Gly
	115					120						125			
Ile	Ser	Thr	Glu	Gly	Leu	Ser	Ala	Ser	Phe	Asp	Leu	Phe	Gln	Ser	Phe
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<210> 5399

<211> 835

<212> DNA

<213> Homo sapiens

<400> 5399

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<210> 5400

<211> 186

<212> PRT

<213> Homo sapiens

<400> 5400

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Gly	Pro	Thr	Met	Gly	Arg	Ser	Gln	Gly	Ser	Pro	Met	Asp	Pro	Met	Val
		20					25					30			
Met	Lys	Arg	Pro	Gln	Leu	Tyr	Gly	Met	Gly	Ser	Asn	Pro	His	Ser	Gln
	35					40					45				
Pro	Gln	Gln	Ser	Ser	Pro	Tyr	Pro	Gly	Gly	Ser	Tyr	Gly	Pro	Pro	Gly
	50				55					60					
Pro	Gln	Arg	Tyr	Pro	Ile	Gly	Ile	Gln	Gly	Arg	Thr	Pro	Gly	Ala	Met
65					70				75					80	
Ala	Gly	Met	Gln	Tyr	Pro	Gln	Gln	Gln	Met	Pro	Pro	Gln	Tyr	Gly	Gln
			85					90					95		
Gln	Gly	Val	Ser	Gly	Tyr	Cys	Gln	Gln	Gly	Gln	Gln	Pro	Tyr	Tyr	Ser
		100					105					110			
Gln	Gln	Pro	Gln	Pro	Pro	His	Leu	Pro	Pro	Gln	Ala	Gln	Tyr	Leu	Pro
	115					120						125			
Ser	Gln	Ser	Gln	Gln	Arg	Tyr	Gln	Pro	Gln	Gln	Asp	Met	Ser	Gln	Glu
	130				135						140				
Gly	Tyr	Gly	Thr	Arg	Ser	Gln	Pro	Pro	Leu	Ala	Pro	Gly	Lys	Pro	Asn
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His	Glu	Asp	Leu	Asn	Leu	Ile	Gln	Gln	Glu	Arg	Pro	Ser	Ser	Leu	Pro
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<210> 5401

<211> 2674

<212> DNA

<213> Homo sapiens

<400> 5401

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120
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360
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420
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480
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<211> 507

<212> PRT

<213> Homo sapiens

<400> 5402

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			20					25					30		
Pro	Arg	His	Val	Ala	Asp	Met	Val	Ile	Ser	Glu	Ser	Met	Asp	Ile	Leu
			35				40					45			
Phe	Arg	Ile	Arg	Gly	Gly	Leu	Asp	Leu	Ala	Phe	Gln	Leu	Ala	Thr	Pro
			50			55				60					
Asn	Glu	Ile	Phe	Leu	Lys	Lys	Ala	Leu	Lys	His	Val	Leu	Ser	Asp	Leu
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Ser	Thr	Lys	Leu	Ser	Ser	Asn	Ala	Leu	Val	Phe	Arg	Ile	Cys	His	Ser
			85					90					95		
Ser	Val	Tyr	Ile	Trp	Pro	Ser	Ser	Asp	Ile	Asn	Thr	Ile	Pro	Gly	Glu

				100											110		
Leu	Thr	Asp	Ala	Ser	Ala	Cys	Lys	Asn	Ile	Leu	Arg	Phe	Ile	Gln	Phe		
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Glu	Pro	Glu	Glu	Asp	Ile	Lys	Arg	Lys	Phe	Met	Arg	Lys	Lys	Asp	Lys		
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Lys	Leu	Ser	Asp	Met	His	Gln	Ile	Val	Asn	Ile	Asp	Leu	Met	Leu	Glu		
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Met	Ser	Thr	Ser	Leu	Ala	Ala	Val	Thr	Pro	Ile	Ile	Glu	Arg	Glu	Ser		
				165					170						175		
Gly	Gly	His	His	Tyr	Val	Asn	Met	Thr	Leu	Pro	Val	Asp	Ala	Val	Ile		
			180					185					190				
Ser	Val	Ala	Pro	Glu	Glu	Thr	Trp	Gly	Lys	Val	Arg	Lys	Leu	Leu	Val		
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Asp	Ala	Ile	His	Asn	Gln	Leu	Thr	Asp	Met	Glu	Lys	Cys	Ile	Leu	Lys		
		210				215					220						
Tyr	Met	Lys	Arg	Thr	Ser	Ile	Val	Val	Pro	Glu	Pro	Leu	His	Phe	Leu		
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Leu	Pro	Gly	Lys	Lys	Asn	Leu	Val	Thr	Ile	Ser	Tyr	Pro	Ser	Gly	Ile		
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Pro	Asp	Gly	Gln	Leu	Gln	Ala	Tyr	Arg	Lys	Glu	Leu	His	Asp	Leu	Phe		
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Asn	Leu	Pro	His	Asp	Arg	Pro	Tyr	Phe	Lys	Arg	Ser	Asn	Ala	Tyr	His		
		275				280						285					
Phe	Pro	Asp	Glu	Pro	Tyr	Lys	Asp	Gly	Tyr	Ile	Arg	Asn	Pro	His	Thr		
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Tyr	Leu	Asn	Pro	Pro	Asn	Met	Glu	Thr	Gly	Met	Ile	Tyr	Val	Val	Gln		
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Gly	Ile	Tyr	Gly	Tyr	His	His	Tyr	Met	Gln	Asp	Arg	Ile	Asp	Asp	Asn		
				325					330					335			
Gly	Trp	Gly	Cys	Ala	Tyr	Arg	Ser	Leu	Gln	Thr	Ile	Cys	Ser	Trp	Phe		
			340					345					350				
Lys	His	Gln	Gly	Tyr	Thr	Glu	Arg	Ser	Ile	Pro	Thr	His	Arg	Glu	Ile		
		355				360						365					
Gln	Gln	Ala	Leu	Val	Asp	Ala	Gly	Asp	Lys	Pro	Ala	Thr	Phe	Val	Gly		
		370				375					380						
Ser	Arg	Gln	Trp	Ile	Gly	Ser	Ile	Glu	Val	Gln	Leu	Val	Leu	Asn	Gln		
385					390				395					400			
Leu	Ile	Gly	Ile	Thr	Ser	Lys	Ile	Leu	Phe	Val	Ser	Gln	Gly	Ser	Glu		
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Ile	Ala	Ser	Gln	Gly	Arg	Glu	Leu	Ala	Asn	His	Phe	Gln	Ser	Glu	Gly		
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<211> 451

<212> DNA

<213> Homo sapiens

<400> 5403

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<210> 5404

<211> 150

<212> PRT

<213> Homo sapiens

<400> 5404

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Ser	Pro	Ala	Leu	Thr	Met	Ala	Pro	Ser	Ser	Leu	Gly	Ala	Leu	Gly	Pro
		35				40					45				
Trp	Val	Gly	Ala	Leu	Glu	Leu	Pro	Arg	Leu	Gln	Ala	Pro	Leu	Ser	Gln
	50				55			60							
Pro	Gly	Thr	His	Ala	Gly	Ala	Xaa	Asp	Pro	Arg	Pro	Ser	Leu	Arg	Lys
65				70				75					80		
Ala	Ser	Leu	Arg	Ala	Ala	Ser	Pro	Ala	Ala	Ser	Ser	Ser	Pro	Trp	Ala
			85					90					95		
Arg	Val	Pro	Cys	Ser	Arg	Ala	Arg	Arg	Pro	Lys	Ser	Ala	Glu	Leu	Leu
			100					105					110		
Arg	Ile	Pro	Gly	Thr	Ser	Thr	Arg	Pro	Lys	Lys	Glu	Arg	Gly	Cys	Pro
	115					120					125				
Ser	Pro	Gly	Leu	Pro	Ala	Ala	Gly	Pro	Gly	Pro	Ser	Pro	Ala	Gly	Arg
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<210> 5405

<211> 1609

<212> DNA

<213> Homo sapiens

<400> 5405

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 <211> 291
 <212> PRT
 <213> Homo sapiens

<400> 5406
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 35 40 45
 Lys Tyr Cys Ser Ala Lys Ala Arg His Ser Trp Thr Lys Asp Arg Arg
 50 55 60
 Ala Met Arg Val Met Ser Ile Glu Arg Lys Lys Trp Met Asn Ile Arg
 65 70 75 80
 Pro Leu Pro Thr Lys Lys Gln Met Pro Leu Gln Phe Asp Leu Cys Asn
 85 90 95
 His Ile Ala Ser Gly Lys Lys Cys Gln Tyr Val Gly Asn Cys Ser Phe
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 Ala His Ser Pro Glu Glu Arg Glu Val Trp Thr Tyr Met Lys Glu Asn
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 Gly Ile Gln Asp Met Glu Gln Phe Tyr Glu Leu Trp Leu Lys Ser Gln
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 Lys Asn Glu Lys Ser Glu Asp Ile Ala Ser Gln Ser Asn Lys Glu Asn
 145 150 155 160
 Gly Lys Gln Ile His Met Pro Thr Asp Tyr Ala Glu Val Thr Val Asp
 165 170 175
 Phe His Cys Trp Met Cys Gly Lys Asn Cys Asn Ser Glu Lys Gln Trp
 180 185 190
 Gln Gly His Ile Ser Ser Glu Lys His Lys Glu Lys Val Phe His Thr
 195 200 205
 Glu Asp Asp Gln Tyr Cys Trp Gln His Arg Phe Pro Thr Gly Tyr Phe
 210 215 220
 Ser Ile Cys Asp Arg Tyr Met Asn Gly Thr Cys Pro Glu Gly Asn Ser
 225 230 235 240
 Cys Lys Phe Ala His Gly Asn Ala Glu Leu His Glu Trp Glu Glu Arg
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 Arg Asp Ala Leu Lys Met Lys Leu Asn Lys Ala Arg Lys Asp His Leu
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 <211> 2010
 <212> DNA
 <213> Homo sapiens

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<210> 5408

<211> 335

<212> PRT

<213> Homo sapiens

<400> 5408

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			20					25					30		
Lys	Glu	Met	Val	Leu	Ser	Glu	Lys	Val	Ser	Gln	Leu	Met	Glu	Trp	Thr
		35					40					45			
Asn	Lys	Arg	Pro	Val	Ile	Arg	Met	Asn	Gly	Asp	Lys	Phe	Arg	Arg	Leu
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Leu	Gln	Leu	His	Arg	Gln	Cys	Val	Val	Cys	Lys	Gln	Ala	Asp	Glu	Glu
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Phe	Gln	Ile	Leu	Ala	Asn	Ser	Trp	Arg	Tyr	Ser	Ser	Ala	Phe	Thr	Asn
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Arg	Ile	Phe	Phe	Ala	Met	Val	Asp	Phe	Asp	Glu	Gly	Ser	Asp	Val	Phe
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Gln	Met	Leu	Asn	Met	Asn	Ser	Ala	Pro	Thr	Phe	Ile	Asn	Phe	Pro	Ala
	130					135					140				
Lys	Gly	Lys	Pro	Lys	Arg	Gly	Asp	Thr	Tyr	Glu	Leu	Gln	Val	Arg	Gly
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Phe	Ser	Ala	Glu	Gln	Ile	Ala	Arg	Trp	Ile	Ala	Asp	Arg	Thr	Asp	Val
			165						170				175		
Asn	Ile	Arg	Val	Ile	Arg	Pro	Pro	Asn	Tyr	Ala	Gly	Pro	Leu	Met	Leu
		180						185					190		
Gly	Leu	Leu	Leu	Ala	Val	Ile	Gly	Gly	Leu	Val	Tyr	Leu	Arg	Arg	Ser
		195					200					205			
Asn	Met	Glu	Phe	Leu	Phe	Asn	Lys	Thr	Gly	Trp	Ala	Phe	Ala	Ala	Leu
	210					215						220			
Cys	Phe	Val	Leu	Ala	Met	Thr	Ser	Gly	Gln	Met	Trp	Asn	His	Ile	Arg
225					230					235				240	
Gly	Pro	Pro	Tyr	Ala	His	Lys	Asn	Pro	His	Thr	Gly	His	Val	Asn	Tyr
			245						250				255		
Ile	His	Gly	Ser	Ser	Gln	Ala	Gln	Phe	Val	Ala	Glu	Thr	His	Ile	Val
		260						265					270		
Leu	Leu	Phe	Asn	Gly	Gly	Val	Thr	Leu	Gly	Met	Val	Leu	Leu	Cys	Glu

	275		280		285	
Ala	Ala Thr Ser Asp Met Asp	Ile Gly Lys Arg	Lys Ile Met Cys Val			
290		295	300			
Ala	Gly Ile Gly Leu Val Val	Leu Phe Phe Ser	Trp Met Leu Ser Ile			
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<210> 5409

<211> 2019

<212> DNA

<213> Homo sapiens

<400> 5409

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<210> 5410

<211> 198

<212> PRT

<213> Homo sapiens

<400> 5410

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			20					25					30		
Gln	Ile	Glu	Gln	Gly	Met	Asp	Met	Val	Ile	Ser	Ser	Val	Ile	Gly	Glu
		35					40					45			
Ser	Tyr	Arg	Leu	Gln	Ser	Met	Gln	Cys	Ser	Ser	Leu	Phe	Gln	Phe	Asp
		50				55					60				
Phe	Gln	Glu	Ala	Val	Lys	Asn	Phe	Phe	Pro	Pro	Gly	Asn	Glu	Val	Val
65					70				75					80	
Asn	Gly	Glu	Asn	Leu	Ser	Phe	Ala	Tyr	Glu	Phe	Lys	Ala	Asp	Ala	Leu
			85						90					95	
Phe	Asp	Phe	Phe	Tyr	Trp	Phe	Gly	Leu	Ser	Asn	Ser	Val	Val	Lys	Val
			100				105					110			
Asn	Gly	Lys	Val	Leu	Asn	Leu	Ser	Thr	Ser	Pro	Glu	Lys	Lys	Glu	
		115				120					125				
Thr	Ile	Lys	Leu	Phe	Leu	Glu	Lys	Met	Ser	Glu	Pro	Leu	Ile	Arg	Arg
		130				135					140				
Ser	Ser	Phe	Ser	Asp	Arg	Lys	Phe	Ser	Val	Thr	Ser	Arg	Gly	Ser	Ile

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Asp	Asp	Val	Phe	Asn	Cys	Asn	Leu	Ser	Pro	Arg	Ser	Ser	Leu	Thr	Glu
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Pro	Leu	Leu	Ala	Glu	Leu	Pro	Phe	Pro	Ser	Val	Leu	Glu	Ser	Glu	Glu
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<210> 5411

<211> 2802

<212> DNA

<213> Homo sapiens

<400> 5411

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<212> PRT

<213> Homo sapiens

<400> 5412

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      35           40           45
Asp Leu Cys Val Leu Phe Gly Lys Gly Asn Ser Pro Leu Leu Gln Lys
      50           55           60
Met Ile Gly Asn Ile Phe Thr Gln Gln Pro Ser Tyr Tyr Ser Asp Leu
      65           70           75           80
Asp Glu Thr Leu Pro Thr Ile Leu Gln Val Phe Ser Asn Ile Leu Gln
      85           90           95
His Cys Gly Leu Gln Gly Asp Gly Ala Asn Thr Thr Pro Gln Lys Leu
      100          105          110
Glu Glu Arg Gly Arg Leu Thr Pro Ser Asp Met Pro Leu Leu Glu Leu
      115          120          125
Lys Asp Ile Val Leu Tyr Leu Cys Asp Thr Cys Thr Thr Leu Trp Ala
      130          135          140
Phe Leu Asp Ile Phe Pro Leu Ala Cys Gln Thr Phe Gln Lys His Asp
      145          150          155          160
Phe Cys Tyr Arg Leu Ala Ser Phe Tyr Glu Ala Ala Ile Pro Glu Met
      165          170          175
Glu Ser Ala Ile Lys Lys Arg Arg Leu Glu Asp Ser Lys Leu Leu Gly
      180          185          190
Asp Leu Trp Gln Arg Leu Ser His Ser Arg Lys Lys Leu Met Glu Ile
      195          200          205
Phe His Ile Ile Leu Asn Gln Ile Cys Leu Leu Pro Ile Leu Glu Ser
      210          215          220
Ser Cys Asp Asn Ile Gln Gly Phe Ile Glu Glu Phe Leu Gln Ile Phe
      225          230          235          240
Ser Ser Leu Leu Gln Glu Lys Arg Phe Leu Arg Asp Tyr Asp Ala Leu
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      260          265          270
Leu Asp Glu Thr Arg Thr Ala Tyr Ile Leu Gln Ala Val Glu Ser Ala
      275          280          285
Trp Glu Gly Val Asp Arg Arg Lys Ala Thr Asp Ala Lys Asp Pro Ser
      290          295          300
Val Ile Glu Glu Pro Asn Gly Glu Pro Asn Gly Val Thr Val Thr Ala
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      325          330          335
Glu Cys Met Gly Ala Ala Ala Ala Val Gly Pro Ala Met Cys Gly Val
      340          345          350
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      355          360          365
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Pro Leu Leu Thr Ser Arg His Asn Val Phe Gln Asn Asp Glu Phe Asp
      420              425              430
Val Phe Ser Arg Asp Ser Val Asp Leu Ser Arg Val His Lys Gly Lys
      435              440              445
Ser Thr Arg Lys Glu Glu Asn Thr Arg Ser Leu Leu Asn Asp Lys Arg
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Ala Val Ala Ala Gln Arg Gln Arg Tyr Glu Gln Tyr Ser Val Val Val
465              470              475              480
Glu Glu Val Pro Leu Gln Pro Gly Glu Ser Leu Pro Tyr His Ser Val
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Tyr Tyr Glu Asp Glu Tyr Asp Asp Thr Tyr Asp Gly Asn Gln Val Gly
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Pro Ser Gln Val Leu Arg Thr Lys Val Pro Arg Glu Gly Gln Glu Glu
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545              550              555              560
Asp His Phe Val Gln Asp Pro Ala Val Leu Arg Glu Lys Ala Glu Ala
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Arg Arg Met Ala Phe Leu Ala Lys Lys Gly Tyr Arg His Asp Ser Ser
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Thr Ala Val Ala Gly Ser Pro Arg Gly His Gly Gln Ser Arg Glu Thr
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Thr Gln Glu Arg Arg Lys Lys Glu Ala Asn Lys Ala Thr Arg Ala Asn
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<210> 5413

<211> 1677

<212> DNA

<213> Homo sapiens

<400> 5413

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360

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<210> 5414

<211> 426

<212> PRT

<213> Homo sapiens

<400> 5414

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 Leu Phe Asn Thr Lys Ser Ser Thr Ser Val Gly Gln Leu Gln Ser Pro
 65 70 75 80
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 85 90 95
 Leu Ala Phe Asn Thr Lys Ser Lys Ala Ser Thr Val Gly Ser Glu Leu
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 Val Leu Val Ser Thr Thr Val Pro Thr Val His His Val Ser Asp Leu
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 Glu Met Ser Ser Thr Leu Asp Cys Leu Pro Val Leu Ala Asp Trp Glu
 130 135 140
 Asp Val Val Leu Leu Pro Ala Ser Gln Pro Glu Glu Asn Val Asp Cys
 145 150 155 160
 Thr Val Pro Ile Ser Asp Ser Asp Leu Glu Ile Ser Phe Asn Ser Gly
 165 170 175
 Glu Arg Leu Met Val Leu Lys Glu Leu Glu Met Ser Ser His Glu Asn
 180 185 190
 Phe Gly Asp Ile Glu Glu Thr Pro Gln Lys Ser Glu Thr Ser Lys Ser
 195 200 205
 Ile Val Tyr Lys Ser Pro His Thr Thr Ile Tyr Asn Val Lys Glu Ala
 210 215 220
 Lys Asp Pro Gly Ser Asp Ile Ser Ala Phe Lys Leu Pro Glu His Lys
 225 230 235 240
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 245 250 255
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 260 265 270
 Ser Pro Gln Ala Phe Pro Pro Ala Lys Lys Gln Pro Phe Thr Ile His
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 Glu Glu Lys Pro Thr Ser Ser Asp Cys Ser Pro Val Arg Ser Ser Ser
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 325 330 335
 Arg Ser Lys Arg Leu Val Val Ser Asn Asn Gly Pro Asn His Gly Lys
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 Val Phe Tyr Cys Cys Pro Ile Gly Lys Tyr Gln Glu Asn Arg Lys Cys
 355 360 365
 Cys Gly Tyr Phe Lys Trp Glu Gln Thr Leu Gln Lys Glu Arg Ala Asn
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 Ser Met Val Pro Ser His Ser Thr Gly Gly Leu Thr Phe Ser Ser Pro
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<210> 5415

<211> 1493

<212> DNA

<213> Homo sapiens

<400> 5415

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<210> 5416
 <211> 55
 <212> PRT
 <213> Homo sapiens

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 Ala Cys Leu Lys Pro Leu Ser
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<210> 5417
 <211> 2087
 <212> DNA
 <213> Homo sapiens

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<210> 5418

<211> 528

<212> PRT

<213> Homo sapiens

<400> 5418

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			20					25					30		
Arg	Leu	Leu	Lys	Glu	Pro	Glu	Lys	Glu	Arg	Asp	Ser	Asp	Ser	Asp	Phe
			35					40					45		
Ser	Pro	Leu	Gln	Gln	Thr	Glu	Gly	Cys	Gln	Arg	Arg	Asp	Lys	His	Phe
			50					55					60		
Arg	His	Ala	Glu	Asn	Pro	His	His	Pro	Leu	Lys	Thr	Ser	Ser	Arg	Ala

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Lys Gly Pro Val Ala Val Thr Gly Ala Ser Thr Pro Glu Gly Thr Ala			
100	105	110	
Pro Pro Pro Pro Ala Ala Pro Ala Pro Pro Lys Gly Glu Lys Glu Gly			
115	120	125	
Gln Arg Pro Thr Gln Pro Val Tyr Gln Ile Gln Asn Arg Gly Met Gly			
130	135	140	
Thr Ala Ala Pro Ala Ala Met Asp Pro Val Val Gly Gln Ala Lys Leu			
145	150	155	
Leu Pro Pro Glu Arg Met Lys His Ser Ile Lys Leu Val Asp Asp Gln			
165	170	175	
Met Asn Trp Cys Asp Ser Ala Ile Glu Tyr Leu Leu Asp Gln Thr Asp			
180	185	190	
Val Leu Val Val Gly Val Leu Gly Leu Gln Gly Thr Gly Lys Ser Met			
195	200	205	
Val Met Ser Leu Leu Ser Ala Asn Thr Pro Glu Glu Asp Gln Arg Thr			
210	215	220	
Tyr Val Phe Arg Ala Gln Ser Ala Glu Met Lys Glu Arg Gly Gly Asn			
225	230	235	
Gln Thr Ser Gly Ile Asp Phe Phe Ile Thr Gln Glu Arg Ile Val Phe			
245	250	255	
Leu Asp Thr Gln Pro Ile Leu Ser Pro Ser Ile Leu Asp His Leu Ile			
260	265	270	
Asn Asn Asp Arg Lys Leu Pro Pro Glu Tyr Asn Leu Pro His Thr Tyr			
275	280	285	
Val Glu Met Gln Ser Leu Gln Ile Ala Ala Phe Leu Phe Thr Val Cys			
290	295	300	
His Val Val Ile Val Val Gln Asp Trp Phe Thr Asp Leu Ser Leu Tyr			
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Arg Leu Trp Asp Leu Gly Cys Lys Cys Lys Ser Asn Ser His Ser Pro			
325	330	335	
Gln Thr Pro Arg Phe Leu Gln Thr Ala Glu Met Val Lys Pro Ser Thr			
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Thr Glu Tyr Tyr Pro His Leu Val Phe Leu Gln Asn Lys Ala Arg Arg			
370	375	380	
Glu Asp Phe Cys Pro Arg Lys Leu Arg Gln Met His Leu Met Ile Asp			
385	390	395	
Gln Leu Met Ala His Ser His Leu Arg Tyr Lys Gly Thr Leu Ser Met			
405	410	415	
Leu Gln Cys Asn Val Phe Pro Gly Leu Pro Pro Asp Phe Leu Asp Ser			
420	425	430	
Glu Val Asn Leu Phe Leu Val Pro Phe Met Asp Ser Glu Ala Glu Ser			
435	440	445	
Glu Asn Pro Pro Arg Ala Gly Pro Gly Ser Ser Pro Leu Phe Ser Leu			
450	455	460	
Leu Pro Gly Tyr Arg Gly His Pro Ser Phe Gln Ser Leu Val Ser Lys			
465	470	475	
Leu Arg Ser Gln Val Met Ser Met Ala Arg Pro Gln Leu Ser His Thr			
485	490	495	
Ile Leu Thr Glu Lys Asn Trp Phe His Tyr Ala Ala Arg Ile Trp Asp			

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<210> 5419
 <211> 989
 <212> DNA
 <213> Homo sapiens

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<210> 5420
 <211> 174
 <212> PRT
 <213> Homo sapiens

<400> 5420
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      35      40      45
Thr Arg Arg Tyr Tyr Arg Ser Pro Ser Arg Tyr Arg Ser Arg Ser Arg
      50      55      60
Ser Arg Ser Arg Ser Arg Gly Arg Ser Tyr Cys Gly Arg Ala Tyr Ala
      65      70      75      80
Ile Ala Arg Gly Gln Arg Tyr Tyr Gly Phe Gly Arg Thr Val Tyr Pro
      85      90      95
Glu Glu His Ser Arg Trp Arg Asp Arg Ser Arg Thr Arg Ser Arg Ser
      100      105      110
Arg Thr Pro Phe Arg Leu Ser Glu Lys Asp Arg Met Glu Leu Leu Glu
      115      120      125
Ile Ala Lys Thr Asn Ala Ala Lys Ala Leu Gly Thr Thr Asn Ile Asp
      130      135      140
Leu Pro Ala Ser Leu Arg Thr Val Pro Ser Ala Lys Glu Thr Ser Arg
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Gly Ile Gly Val Ser Ser Asn Gly Ala Lys Pro Glu Lys Ser
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<210> 5421

<211> 1239

<212> DNA

<213> Homo sapiens

<400> 5421

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<210> 5422

<211> 276

<212> PRT

<213> Homo sapiens

<400> 5422

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 Val Ala Phe Ser Leu Val Ala Ser Val Gly Ala Trp Thr Gly Ser Met
 50 55 60
 Gly Asn Trp Ser Met Phe Thr Trp Cys Phe Cys Phe Ser Val Thr Leu
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 Ile Ile Leu Ile Val Glu Leu Cys Gly Leu Gln Ala Arg Phe Pro Leu
 85 90 95
 Ser Trp Arg Asn Phe Pro Ile Thr Phe Ala Cys Tyr Ala Ala Leu Phe
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 Cys Leu Ser Ala Ser Ile Ile Tyr Pro Thr Thr Tyr Val Gln Phe Leu
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 Ser His Gly Arg Ser Arg Asp His Ala Ile Ala Ala Thr Phe Phe Ser
 130 135 140
 Cys Ile Ala Cys Val Ala Tyr Ala Thr Glu Val Ala Trp Thr Arg Ala
 145 150 155 160
 Arg Pro Gly Glu Ile Thr Gly Tyr Met Ala Thr Val Pro Gly Leu Leu
 165 170 175
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 180 185 190
 Asp Pro Asn Leu Tyr Gln His Gln Pro Ala Leu Glu Trp Cys Val Ala
 195 200 205
 Val Tyr Ala Ile Cys Phe Ile Leu Ala Ala Ile Ala Ile Leu Leu Asn
 210 215 220
 Leu Gly Glu Cys Thr Asn Val Leu Pro Ile Pro Phe Pro Ser Phe Leu
 225 230 235 240
 Ser Gly Leu Ala Leu Cys Leu Ser Ser Ser Met Pro Pro Pro Leu Phe
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260

265

270

<210> 5423
<211> 2427
<212> DNA
<213> Homo sapiens

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<210> 5424

<211> 570

<212> PRT

<213> Homo sapiens

<400> 5424

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Leu	Leu	Thr	Met	Ser	Asn	Asn	Asn	Pro	Glu	Leu	Phe	Ser	Pro	Pro	Gln
			20					25					30		
Lys	Tyr	Gln	Leu	Leu	Val	Tyr	His	Ala	Asp	Ser	Leu	Phe	His	Asp	Lys
		35					40					45			
Glu	Tyr	Arg	Asn	Ala	Val	Ser	Lys	Tyr	Thr	Met	Ala	Leu	Gln	Gln	Lys
	50					55					60				
Lys	Ala	Leu	Ser	Lys	Thr	Ser	Lys	Val	Arg	Pro	Ser	Thr	Gly	Asn	Ser

65					70					75				80
Ala	Ser	Thr	Pro	Gln	Ser	Gln	Cys	Leu	Pro	Ser	Glu	Ile	Glu	Val
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Tyr	Lys	Met	Ala	Glu	Cys	Tyr	Thr	Met	Leu	Lys	Gln	Asp	Lys	Asp
			100					105					110	
Ile	Ala	Ile	Leu	Asp	Gly	Ile	Pro	Ser	Arg	Gln	Arg	Thr	Pro	Lys
		115					120					125		
Asn	Met	Met	Leu	Ala	Asn	Leu	Tyr	Lys	Lys	Ala	Gly	Gln	Glu	Arg
	130					135				140				
Ser	Val	Thr	Ser	Tyr	Lys	Glu	Val	Leu	Arg	Gln	Cys	Pro	Leu	Ala
	145			150					155				160	
Asp	Ala	Ile	Leu	Gly	Leu	Leu	Ser	Leu	Ser	Val	Lys	Gly	Ala	Glu
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Ala	Ser	Met	Thr	Met	Asn	Val	Ile	Gln	Thr	Val	Pro	Asn	Leu	Asp
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Leu	Ser	Val	Trp	Ile	Lys	Ala	Tyr	Ala	Phe	Val	His	Thr	Gly	Asp
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Ser	Arg	Ala	Ile	Ser	Thr	Ile	Cys	Ser	Leu	Glu	Lys	Lys	Ser	Leu
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Arg	Asp	Asn	Val	Asp	Leu	Gly	Ser	Leu	Ala	Asp	Leu	Tyr	Phe	Arg
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Ala	Gly	Asp	Asn	Lys	Asn	Ser	Val	Leu	Lys	Phe	Glu	Gln	Ala	Gln
			245					250					255	
Leu	Asp	Pro	Tyr	Leu	Ile	Lys	Gly	Met	Asp	Val	Tyr	Gly	Tyr	Leu
		260					265					270		
Ala	Arg	Glu	Gly	Arg	Leu	Glu	Asp	Val	Glu	Asn	Leu	Gly	Cys	Arg
	275					280					285			
Phe	Asn	Ile	Ser	Asp	Gln	His	Ala	Glu	Pro	Trp	Val	Val	Ser	Gly
	290				295						300			
His	Ser	Phe	Tyr	Ser	Lys	Arg	Tyr	Ser	Arg	Ala	Leu	Tyr	Leu	Gly
	305				310				315				320	
Lys	Ala	Ile	Gln	Leu	Asn	Ser	Asn	Ser	Val	Gln	Ala	Leu	Leu	Leu
			325					330					335	
Gly	Ala	Ala	Leu	Arg	Asn	Met	Gly	Arg	Val	Gln	Glu	Ala	Ile	Ile
		340					345					350		
Phe	Arg	Glu	Ala	Ile	Arg	Leu	Ala	Pro	Cys	Arg	Leu	Asp	Cys	Tyr
	355					360				365				
Gly	Leu	Ile	Glu	Cys	Tyr	Leu	Ala	Ser	Asn	Ser	Ile	Arg	Glu	Ala
	370				375					380				
Val	Met	Ala	Asn	Asn	Val	Tyr	Lys	Thr	Leu	Gly	Ala	Asn	Ala	Gln
	385			390					395				400	
Leu	Thr	Leu	Leu	Ala	Thr	Val	Cys	Leu	Glu	Asp	Pro	Val	Thr	Gln
			405					410					415	
Lys	Ala	Lys	Thr	Leu	Leu	Asp	Lys	Ala	Leu	Thr	Gln	Arg	Pro	Asp
		420					425					430		
Ile	Lys	Ala	Val	Val	Lys	Lys	Ala	Glu	Leu	Leu	Ser	Arg	Glu	Gln
	435					440					445			
Tyr	Glu	Asp	Gly	Ile	Ala	Leu	Leu	Arg	Asn	Ala	Leu	Ala	Asn	Gln
	450				455					460				
Asp	Cys	Val	Leu	His	Arg	Ile	Leu	Gly	Asp	Phe	Leu	Val	Ala	Val
	465			470					475				480	
Glu	Tyr	Gln	Glu	Ala	Met	Asp	Gln	Tyr	Ser	Ile	Ala	Leu	Ser	Leu
			485				490					495		
Pro	Asn	Asp	Gln	Lys	Ser	Leu	Glu	Gly	Met	Gln	Lys	Met	Glu	Lys

				500					505				510				
Glu	Ser	Pro	Thr	Asp	Ala	Thr	Gln	Glu	Glu	Asp	Val	Asp	Asp	Met	Glu		
		515					520					525					
Gly	Ser	Gly	Glu	Glu	Gly	Asp	Leu	Glu	Gly	Ser	Asp	Ser	Glu	Ala	Ala		
		530				535					540						
Gln	Trp	Ala	Asp	Gln	Glu	Gln	Trp	Phe	Gly	Met	Ser	Glu	Gly	Ala	Ala		
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Ala	Pro	Trp	Pro	Gln	Trp	Pro	Ala	Leu	Leu								
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<210> 5425
<211> 639
<212> DNA
<213> Homo sapiens
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120
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180
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240
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300
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420
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480
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540
gccnacgggg tggtggatgg gatctaccgg ctctcaggcg tgtcttccaa catccagagg
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639

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<210> 5426
<211> 98
<212> PRT
<213> Homo sapiens
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<400> 5426
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Pro Ser Cys Ala Pro Ala Leu Leu Gly Ser Gly Cys Gly Ser Gly Glu
 20                    25                    30
Ser Cys Asp Arg Gly Cys Leu Ala Ala Ile Leu Ala Ser Thr Ser Ala
 35                    40                    45
Thr Gln Ala Arg Met Cys Pro Val Leu Arg Cys Cys Ser Glu Phe Ile
 50                    55                    60
Glu Ala Xaa Gly Val Val Asp Gly Ile Tyr Arg Leu Ser Gly Val Ser

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4610

ccggcgggcg gcaaggctcc gggccagcat gggggcttcg tggtgactgt caagcaagag
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 120
 gcgctgagct gggggaggcc ccgggctccc gccccagcct cgaagccccg cccagggctg
 180
 gatttgaatt gcttgtggct ccgcccacag cccattttcc tctggaagct gagacccccg
 240
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 480
 ctcagatecc ctcaccctg gccagggatc cctctaacc accgtgtccc gactgctgac
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<210> 5430

<211> 94

<212> PRT

<213> Homo sapiens

<400> 5430

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 His Glu Glu Glu Val Arg Val Pro Ala Leu Ser Trp Gly Arg Pro Arg
 35 40 45
 Ala Pro Ala Pro Ala Ser Lys Pro Arg Pro Arg Leu Asp Leu Asn Cys
 50 55 60
 Leu Trp Leu Arg Pro Gln Pro Ile Phe Leu Trp Lys Leu Arg Pro Arg
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 Pro Val Pro Ala Ala Thr Pro Leu Thr Gly Pro Leu Pro Leu
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<210> 5431

<211> 3005

<212> DNA

<213> Homo sapiens

<400> 5431

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240
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<210> 5432

<211> 863

<212> PRT

<213> Homo sapiens

<400> 5432

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Glu	Tyr	Leu	Leu	Arg	His	Leu	Ala	Arg	Met	Ala	Arg	His	Ser	Ala	Asn
			20					25					30		
Thr	Ser	Met	His	Ala	Arg	Asn	Leu	Ala	Ile	Val	Trp	Ala	Pro	Asn	Leu

[illegible]

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          485          490          495
Gly Gly Thr Pro Pro Ala Ser Gln Ser Pro Phe His Arg Ser Leu Ser
          500          505          510
Leu Glu Val Gly Gly Glu Pro Leu Gly Thr Ser Gly Ser Gly Pro Pro
          515          520          525
Pro Asn Ser Leu Ala His Pro Gly Ala Trp Val Pro Gly Pro Pro Pro
          530          535          540
Tyr Leu Pro Arg Gln Gln Ser Asp Gly Ser Leu Leu Arg Ser Gln Arg
545          550          555          560
Pro Met Gly Thr Ser Arg Arg Gly Leu Arg Gly Pro Ala Gln Val Ser
          565          570          575
Ala Gln Leu Arg Ala Gly Gly Gly Gly Arg Asp Ala Pro Glu Ala Ala
          580          585          590
Ala Gln Ser Pro Cys Ser Val Pro Ser Gln Val Pro Thr Pro Gly Phe
          595          600          605
Phe Ser Pro Ala Pro Arg Glu Cys Leu Pro Pro Phe Leu Gly Val Pro
          610          615          620
Lys Pro Gly Leu Tyr Pro Leu Gly Pro Pro Ser Phe Gln Pro Ser Ser
625          630          635          640
Pro Ala Pro Val Trp Arg Ser Ser Leu Gly Pro Pro Ala Pro Leu Asp
          645          650          655
Arg Gly Glu Asn Leu Tyr Tyr Glu Ile Gly Ala Ser Glu Gly Ser Pro
          660          665          670
Tyr Ser Gly Pro Thr Arg Ser Trp Ser Pro Phe Arg Ser Met Pro Pro
          675          680          685
Asp Arg Leu Asn Ala Ser Tyr Gly Met Leu Gly Gln Ser Pro Pro Leu
690          695          700
His Arg Ser Pro Asp Phe Leu Leu Ser Tyr Pro Pro Ala Pro Ser Cys
705          710          715          720
Phe Pro Pro Asp His Leu Gly Tyr Ser Ala Pro Gln His Pro Ala Arg
          725          730          735
Arg Pro Thr Pro Pro Glu Pro Leu Tyr Val Asn Leu Ala Leu Gly Pro
          740          745          750
Arg Gly Pro Ser Pro Ala Ser Ser Ser Ser Ser Pro Pro Ala His
          755          760          765
Pro Arg Ser Arg Ser Asp Pro Gly Pro Pro Val Pro Arg Leu Pro Gln
          770          775          780
Lys Gln Arg Ala Pro Trp Gly Pro Arg Thr Pro His Arg Val Pro Gly
785          790          795          800
Pro Trp Gly Pro Pro Glu Pro Leu Leu Leu Tyr Arg Ala Ala Pro Pro
          805          810          815
Ala Tyr Gly Arg Gly Gly Glu Leu His Arg Gly Ser Leu Tyr Arg Asn
          820          825          830
Gly Gly Gln Arg Gly Glu Gly Ala Gly Pro Pro Pro Pro Tyr Pro Thr
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          850          855          860

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<210> 5433

<211> 385

<212> DNA

<213> Homo sapiens

<400> 5433

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<210> 5434

<211> 128

<212> PRT

<213> Homo sapiens

<400> 5434

Asp	Leu	Thr	Asn	Leu	His	Tyr	Ser	Thr	Pro	Leu	Pro	Ala	Ser	Leu	Asp
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Thr	Thr	Asp	His	His	Phe	Gly	Ser	Met	Ser	Val	Gly	Asn	Ser	Val	Asn
			20					25					30		
Asn	Ile	Pro	Ala	Ala	Met	Thr	His	Leu	Gly	Ile	Arg	Ser	Ser	Ser	Gly
	35					40						45			
Leu	Gln	Ser	Ser	Arg	Ser	Asn	Pro	Ser	Ile	Gln	Ala	Thr	Leu	Asn	Lys
	50				55						60				
Thr	Val	Leu	Ser	Ser	Ser	Leu	Asn	Asn	His	Pro	Gln	Thr	Ser	Val	Pro
65					70				75					80	
Asn	Ala	Ser	Ala	Leu	His	Pro	Ser	Leu	Arg	Leu	Phe	Ser	Leu	Ser	Asn
			85					90					95		
Pro	Ser	Leu	Ser	Thr	Thr	Asn	Leu	Ser	Gly	Pro	Ser	Arg	Arg	Arg	Gln
			100					105				110			
Pro	Pro	Val	Ser	Pro	Leu	Thr	Leu	Ser	Pro	Gly	Pro	Glu	Ala	His	Gln
		115					120					125			

<210> 5435

<211> 617

<212> DNA

<213> Homo sapiens

<400> 5435

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120
ccttgataa gtatactttg tataacttct ggcaaaccat aattatgaac tcacattact
180
atagtactat aatactgcag aaaggatct tgcgtttcag aaatgtcact catccagttt
240

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 480
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<210> 5436

<211> 119

<212> PRT

<213> Homo sapiens

<400> 5436

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His	Pro	Leu	Ile	Ala	Arg	Ala	Lys	Gly	Lys	Thr	Met	Ala	Ser	Ser	Asp
	20						25					30			
Gly	Thr	Ile	Arg	Ala	Asn	Leu	Tyr	Phe	Lys	Ile	Leu	Gln	Pro	Lys	Met
	35					40					45				
Lys	Asn	Asn	His	Ile	Arg	Ser	Cys	Arg	Ala	Val	Leu	His	Arg	Ser	Asp
	50					55				60					
Leu	Leu	Val	Arg	Lys	Leu	Leu	Ala	Leu	Cys	Lys	Glu	Lys	Glu	Asp	Cys
65				70					75					80	
Asn	Arg	Asn	His	Glu	Pro	Gly	Arg	Glu	Met	Gly	Leu	Glu	Lys	Gly	Glu
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<212> DNA

<213> Homo sapiens

<400> 5437

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<212> PRT

<213> Homo sapiens

<400> 5438

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<212> PRT

<213> Homo sapiens

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<210> 5444

<211> 438

<212> PRT

<213> Homo sapiens

<400> 5444

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			20					25						30	
Lys	Ile	Arg	Leu	Arg	Cys	Gln	Lys	Gly	Ile	Pro	Pro	Ser	Leu	Arg	Gly
			35				40					45			
Arg	Ala	Trp	Gln	Tyr	Leu	Ser	Gly	Gly	Lys	Val	Lys	Leu	Gln	Gln	Asn
			50			55				60					
Pro	Gly	Lys	Phe	Asp	Glu	Leu	Asp	Met	Ser	Pro	Gly	Asp	Pro	Lys	Trp
65				70					75					80	
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				85					90					95					
Met	Phe	Val	Ser	Arg	Gly	Gly	His	Gly	Gln	Gln	Asp	Leu	Phe	Arg	Val				
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Leu	Lys	Ala	Tyr	Thr	Leu	Tyr	Arg	Pro	Glu	Glu	Gly	Tyr	Cys	Gln	Ala				
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Gln	Ala	Pro	Ile	Ala	Ala	Val	Leu	Leu	Met	His	Met	Pro	Ala	Glu	Gln				
		130				135					140								
Ala	Phe	Trp	Cys	Leu	Val	Gln	Ile	Cys	Glu	Lys	Tyr	Leu	Pro	Gly	Tyr				
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Ser	Leu	Leu	Gln	Lys	Val	Ser	Pro	Val	Ala	His	Lys	His	Leu	Ser	Arg				
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Gln	Lys	Ile	Asp	Pro	Leu	Leu	Tyr	Met	Thr	Glu	Trp	Phe	Met	Cys	Ala				
		195					200					205							
Phe	Ser	Arg	Thr	Leu	Pro	Trp	Ser	Ser	Val	Leu	Arg	Val	Trp	Asp	Met				
		210				215					220								
Phe	Phe	Cys	Glu	Gly	Val	Lys	Ile	Ile	Phe	Arg	Val	Gly	Leu	Val	Leu				
225				230					235					240					
Leu	Lys	His	Ala	Leu	Gly	Ser	Pro	Glu	Lys	Val	Lys	Ala	Cys	Gln	Gly				
			245					250					255						
Gln	Tyr	Glu	Thr	Ile	Glu	Arg	Leu	Arg	Ser	Leu	Ser	Pro	Lys	Ile	Met				
			260					265					270						
Gln	Glu	Ala	Phe	Leu	Val	Gln	Glu	Val	Val	Glu	Leu	Pro	Val	Thr	Glu				
		275					280					285							
Arg	Gln	Ile	Glu	Arg	Glu	His	Leu	Ile	Gln	Leu	Arg	Arg	Trp	Gln	Glu				
		290				295					300								
Thr	Arg	Gly	Glu	Leu	Gln	Cys	Arg	Ser	Pro	Pro	Arg	Leu	His	Gly	Ala				
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Lys	Ala	Ile	Leu	Asp	Ala	Glu	Pro	Gly	Pro	Arg	Pro	Ala	Leu	Gln	Pro				
			325					330					335						
Ser	Pro	Ser	Ile	Arg	Leu	Pro	Leu	Asp	Ala	Pro	Leu	Pro	Gly	Ser	Lys				
			340					345					350						
Ala	Lys	Pro	Lys	Pro	Pro	Lys	Gln	Ala	Gln	Lys	Glu	Gln	Arg	Lys	Gln				
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<210> 5445
<211> 1187
<212> DNA
<213> Homo sapiens
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 180
 cgattttcca cgatgagttg attcgtaatt ccatttatgt gctagttttt agaattttcc
 240
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 360
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 420
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 480
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 660
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 720
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 780
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 900
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 960
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 1080
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<210> 5446

<211> 107

<212> PRT

<213> Homo sapiens

<400> 5446

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Glu	Ser	Lys	His	Thr	Thr	Cys	Ala	Lys	Val	Lys	Trp	Pro	Gln	Pro	Pro
		20					25						30		
Arg	Lys	Thr	Gly	Trp	Arg	Phe	Leu	Arg	Arg	Ser	Thr	His	Ser	Arg	His
		35				40					45				
Gly	Thr	Gln	Trp	Phe	His	Pro	Gln	Val	Cys	Ser	Asn	Arg	His	His	Ser
	50				55					60					
Pro	Arg	Pro	His	Ala	Asp	Ser	Asp	Thr	Arg	Ala	His	Ser	Pro	Arg	Ser

65		70		75		80									
His	Ala	Asp	Ser	Asp	Met	Arg	Ala	His	Ser	Leu	Ser	His	Asp	Ser	Gln
				85					90				95		
Thr	Val	Glu	Thr	Arg	Gln	Val	Gly	Leu	Gly	Cys					
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<210> 5447

<211> 1444

<212> DNA

<213> Homo sapiens

<400> 5447

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1260

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<210> 5448
 <211> 189
 <212> PRT
 <213> Homo sapiens

<400> 5448
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 Ala Leu His Ser Ala Leu Gly Gly Thr Lys Lys Lys Lys Lys Thr Ile
 35 40 45
 Val Thr Asp Val Phe Gln Gly Ser Met Arg Ile Phe Thr Lys Lys Leu
 50 55 60
 Pro His Pro Asp Leu Pro Ala Glu Glu Lys Glu Gln Leu Leu His Asn
 65 70 75 80
 Asp Glu Tyr Gln Glu Thr Met Val Glu Ser Thr Phe Met Tyr Leu Thr
 85 90 95
 Leu Asp Leu Pro Thr Ala Pro Leu Tyr Lys Asp Glu Lys Glu Gln Leu
 100 105 110
 Ile Ile Pro Gln Val Pro Leu Phe Asn Ile Leu Ala Lys Phe Asn Gly
 115 120 125
 Ile Thr Glu Lys Glu Tyr Lys Thr Tyr Lys Glu Asn Phe Leu Lys Arg
 130 135 140
 Phe Gln Leu Thr Lys Leu Pro Pro Tyr Leu Ile Phe Cys Ile Lys Arg
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<210> 5449
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 <212> DNA
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<210> 5450

<211> 293

<212> PRT

<213> Homo sapiens

<400> 5450

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		20					25					30			
Ile	Thr	Gln	Glu	Arg	Ile	Val	Phe	Leu	Asp	Thr	Gln	Pro	Ile	Leu	Ser
	35					40					45				
Pro	Ser	Ile	Leu	Asp	His	Leu	Ile	Asn	Asn	Asp	Arg	Lys	Leu	Pro	Pro
	50				55					60					
Glu	Tyr	Asn	Leu	Pro	His	Thr	Tyr	Val	Glu	Met	Gln	Ser	Leu	Gln	Ile

65					70					75				80
Ala	Ala	Phe	Leu	Phe	Thr	Val	Cys	His	Val	Gly	Ile	Xaa	Val	Gln Asp
				85					90					95
Trp	Phe	Thr	Asp	Leu	Ser	Leu	Tyr	Arg	Phe	Leu	Gln	Thr	Ala	Glu Met
			100					105					110	
Val	Lys	Pro	Ser	Thr	Pro	Ser	Pro	Ser	His	Glu	Ser	Ser	Ser	Ser Ser
		115					120					125		
Gly	Ser	Asp	Glu	Gly	Thr	Glu	Tyr	Tyr	Pro	His	Leu	Val	Phe	Phe Gln
	130					135					140			
Asn	Lys	Ala	Arg	Arg	Glu	Asp	Phe	Cys	Pro	Arg	Lys	Leu	Arg	Gln Met
145					150					155				160
His	Leu	Met	Ile	Asp	Gln	Leu	Met	Ala	His	Ser	His	Leu	Arg	Tyr Lys
			165						170					175
Gly	Thr	Leu	Ser	Met	Leu	Gln	Cys	Asn	Val	Phe	Pro	Gly	Leu	Pro Pro
		180						185				190		
Asp	Phe	Leu	Asp	Ser	Glu	Val	Asn	Leu	Phe	Leu	Val	Pro	Phe	Met Asp
	195						200					205		
Ser	Glu	Ala	Glu	Ser	Glu	Asn	Pro	Pro	Arg	Ala	Gly	Pro	Gly	Ser Ser
	210					215					220			
Pro	Leu	Phe	Ser	Leu	Leu	Pro	Gly	Tyr	Arg	Gly	His	Pro	Ser	Phe Gln
225					230					235				240
Ser	Leu	Val	Ser	Lys	Leu	Arg	Ser	Gln	Val	Met	Ser	Met	Ala	Arg Pro
			245						250					255
Gln	Leu	Ser	His	Thr	Ile	Leu	Thr	Glu	Lys	Asn	Trp	Phe	His	Tyr Ala
		260					265					270		
Ala	Arg	Ile	Trp	Asp	Gly	Val	Arg	Lys	Ser	Ser	Ala	Leu	Ala	Glu Tyr
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<210> 5451

<211> 1184

<212> DNA

<213> Homo sapiens

<400> 5451

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<210> 5452

<211> 206

<212> PRT

<213> Homo sapiens

<400> 5452

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		20						25					30		
Ser	Ser	Pro	Glu	Leu	Ser	Val	Ala	Phe	His	His	Ser	Gly	Pro	Ser	Cys
		35					40					45			
Leu	Ser	Pro	Ala	Leu	Ser	Gln	Thr	Thr	Gln	Lys	Ser	Gly	His	Leu	Trp
		50				55						60			
Ala	Pro	Gly	Met	Val	Thr	Glu	Glu	Lys	His	Ala	Val	Pro	Val	Ser	Pro
65					70					75				80	
Gly	Phe	Cys	Gln	Lys	Ile	Glu	Gln	Val	Gln	Leu	Thr	His	Cys	Tyr	Cys
			85						90					95	
Arg	Ser	Leu	Lys	Leu	Pro	Gly	Leu	Val	Leu	Asp	Pro	Ser	Arg	Asn	His
			100					105						110	
Gln	Val	Arg	His	Leu	Glu	Pro	Pro	Gly	Glu	Gly	Pro	Pro	Ser	Arg	Ala
		115					120						125		
Leu	Lys	Glu	Leu	His	Glu	Ile	Arg	Asn	Cys	Leu	Met	Lys	Cys	Ile	Ser
		130				135						140			
Leu	Tyr	Leu	Glu	Asp	Glu	Ala	Gln	Thr	Pro	Thr	Pro	Leu	Ser	Pro	Pro
145				150						155				160	
Gly	Leu	Gly	Met	Ser	Pro	Ala	Ala	Arg	Pro	Arg	Ser	Phe	Pro	Gly	Gly
			165						170					175	
Leu	Gly	Glu	Val	Gly	Ala	Gly	Thr	Ile	Ser	Val	Pro	Ser	Thr	Leu	Thr
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<210> 5453
<211> 1974
<212> DNA
<213> Homo sapiens

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<210> 5454

<211> 320

<212> PRT

<213> Homo sapiens

<400> 5454

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Val	Ala	Leu	Asn	Lys	Ala	Ala	Ala	Gly	Ser	Ala	Tyr	Arg	Cys	Phe	Lys
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		100						105					110		
Gln	Glu	Ser	Arg	Val	Thr	Ile	Ser	His	Ala	Ile	Gly	Arg	Asn	Ser	Thr
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His	Pro	Val	Val	Gly	Asp	Leu	Thr	Tyr	Gly	Glu	Val	Ser	Gly	Arg	Glu
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210	215	220
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	245	250
Gln Leu Val Gln Ala Leu Arg Ala Thr Pro Asp Pro Asp Pro Glu Asp		255
	260	265
Arg Gly Pro Arg Pro Gly Ser Pro Ser Ala Leu Leu Pro Gly Pro Gly		270
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Arg Pro Pro Pro Pro Thr Lys Pro Pro Glu Thr Glu Ala Gln Arg		285
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<210> 5455

<211> 975

<212> DNA

<213> Homo sapiens

<400> 5455

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<210> 5456
 <211> 149
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 His Cys Pro Leu Ala Val Arg Leu Ala Cys Pro Ala Val Pro Thr Thr
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 Val Val Lys Gln Arg Leu Gln Met Tyr Asn Ser Gln His Arg Ser Ala
 65 70 75 80
 Ile Ser Cys Ile Arg Thr Val Trp Arg Thr Glu Gly Leu Gly Ala Phe
 85 90 95
 Tyr Arg Ser Tyr Thr Thr Gln Leu Thr Met Asn Ile Pro Phe Gln Ser
 100 105 110
 Ile His Phe Ile Thr Tyr Glu Phe Leu Gln Glu Gln Val Asn Pro His
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 130 135 140
 Ala Leu Ala Ala Ala
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<210> 5457
 <211> 448
 <212> DNA
 <213> Homo sapiens

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 <211> 81
 <212> PRT

<213> Homo sapiens

<400> 5458

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			20					25					30		
Tyr	Glu	Asn	Leu	Pro	Thr	Ser	Ala	Ser	Val	Ser	Thr	His	Met	Thr	Ala
		35					40					45			
Gly	Ala	Met	Ala	Gly	Ile	Leu	Glu	His	Ser	Val	Met	Tyr	Pro	Val	Asp
	50					55					60				
Ser	Val	Lys	Val	Met	Trp	Thr	Val	Glu	Leu	Cys	Ala	Gly	His	Phe	Gln
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<210> 5459

<211> 1468

<212> DNA

<213> Homo sapiens

<400> 5459

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<210> 5460

<211> 155

<212> PRT

<213> Homo sapiens

<400> 5460

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		20					25					30			
Ser	Glu	Asp	Tyr	Glu	Asn	Leu	Pro	Thr	Ser	Ala	Ser	Val	Ser	Thr	His
		35				40						45			
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	50				55					60					
Pro	Val	Asp	Ser	Val	Lys	Thr	Arg	Met	Gln	Ser	Leu	Ser	Pro	Asp	Pro
65				70					75					80	
Lys	Ala	Gln	Tyr	Thr	Ser	Ile	Tyr	Gly	Ala	Leu	Lys	Lys	Ile	Met	Gln
			85					90					95		
Thr	Glu	Gly	Phe	Trp	Arg	Pro	Leu	Arg	Gly	Val	Asn	Val	Met	Ile	Met
		100					105					110			
Gly	Ala	Gly	Pro	Ala	His	Ala	Met	Tyr	Phe	Ala	Cys	Tyr	Glu	Asn	Met
		115				120					125				
Lys	Arg	Thr	Leu	Asn	Asp	Val	Phe	His	His	Gln	Gly	Asn	Ser	His	Leu
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<211> 1725

<212> DNA

<213> Homo sapiens

<400> 5461

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<210> 5462

<211> 159

<212> PRT

<213> Homo sapiens

<400> 5462

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		20					25					30			
Leu	Gly	Ile	Cys	Tyr	Asp	Met	Arg	Phe	Ala	Glu	Leu	Ala	Gln	Ile	Tyr
	35					40					45				
Ala	Gln	Arg	Gly	Cys	Gln	Leu	Leu	Val	Tyr	Pro	Gly	Ala	Phe	Asn	Leu
	50				55					60					
Thr	Thr	Gly	Pro	Ala	His	Trp	Glu	Leu	Leu	Gln	Arg	Ser	Arg	Ala	Val
65				70				75						80	
Asp	Asn	Gln	Val	Tyr	Val	Ala	Thr	Ala	Ser	Pro	Ala	Arg	Asp	Asp	Lys
		85					90					95			
Ala	Ser	Tyr	Val	Ala	Trp	Gly	His	Ser	Thr	Val	Val	Asn	Pro	Trp	Gly
	100					105				110					
Glu	Val	Leu	Ala	Lys	Ala	Gly	Thr	Glu	Glu	Ala	Ile	Val	Tyr	Ser	Asp
	115					120				125					
Ile	Asp	Leu	Lys	Lys	Leu	Ala	Glu	Ile	Arg	Gln	Gln	Ile	Pro	Val	Phe
	130				135					140					
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<210> 5463

<211> 792

<212> DNA

<213> Homo sapiens

<400> 5463

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<210> 5464

<211> 111

<212> PRT

<213> Homo sapiens

<400> 5464

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Leu	His	Asp	Ala	Val	Met	Asn	Pro	Ala	Glu	Val	Val	Lys	Gln	Arg	Leu
			20					25					30		
Gln	Met	Tyr	Asn	Ser	Gln	His	Arg	Ser	Ala	Ile	Ser	Cys	Ile	Arg	Thr
		35					40					45			
Val	Trp	Arg	Thr	Glu	Gly	Leu	Gly	Ala	Phe	Tyr	Arg	Ser	Tyr	Thr	Thr
	50					55					60				
Gln	Leu	Thr	Met	Asn	Ile	Pro	Phe	Gln	Ser	Ile	His	Phe	Ile	Thr	Tyr
65					70					75				80	
Glu	Phe	Leu	Gln	Glu	Gln	Val	Asn	Pro	His	Arg	Thr	Tyr	Asn	Pro	Gln
			85					90						95	
Ser	His	Ile	Ile	Ser	Gly	Gly	Leu	Ala	Gly	Ala	Leu	Ala	Ala	Ala	
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<210> 5465

<211> 497

<212> DNA

<213> Homo sapiens

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<210> 5466
<211> 134
<212> PRT
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<400> 5466
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35 40 45
Trp Trp Asp Cys Leu Gly His Arg His Gln His Gly Val Arg Ala Ile
50 55 60
Ser Gly Asp Ile Gly Gly Ala Thr Thr Arg Trp Gly Ile Phe Asn Arg
65 70 75 80
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<210> 5467
<211> 1329
<212> DNA
<213> Homo sapiens

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<210> 5468

<211> 363

<212> PRT

<213> Homo sapiens

<400> 5468

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Ser	Ser	Phe	Leu	Asp	Leu	Gly	Asp	Leu	Asn	Glu	Ser	Asp	Phe	Leu	Asn	30
			20					25								
Asn	Ala	His	Phe	Pro	Glu	His	Leu	Asp	His	Phe	Thr	Glu	Asn	Met	Glu	45
			35				40									
Asp	Phe	Ser	Asn	Asp	Leu	Phe	Ser	Ser	Phe	Phe	Asp	Asp	Pro	Val	Leu	60
			50			55										
Asp	Glu	Lys	Ser	Pro	Leu	Leu	Asp	Met	Glu	Leu	Asp	Ser	Pro	Thr	Pro	80
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Gln	Ser	Pro	Leu	Val	Pro	Ile	Lys	Met	Glu	Asp	Thr	Thr	Gln	Asp	Ala	110
				100				105								
Glu	His	Gly	Ala	Trp	Ala	Leu	Gly	His	Lys	Leu	Cys	Ser	Ile	Met	Val	125
			115				120									
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						135										
Ser	Ala	Met	Ala	Ala	Ala	Ala	Met	Ala	Thr	Thr	Pro	Leu	Leu	Gly		160
					150					155						
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				165					170					175					
Met	Thr	Gln	Leu	Pro	Val	Ile	Lys	Ala	Glu	Pro	Leu	Glu	Val	Asn	Gln				
			180					185					190						
Phe	Leu	Lys	Val	Thr	Pro	Glu	Asp	Leu	Val	Gln	Met	Pro	Pro	Thr	Pro				
		195					200					205							
Pro	Ser	Ser	His	Gly	Ser	Asp	Ser	Asp	Gly	Ser	Gln	Ser	Pro	Arg	Ser				
	210					215					220								
Leu	Pro	Pro	Ser	Ser	Pro	Val	Arg	Pro	Met	Ala	Arg	Ser	Ser	Thr	Ala				
225					230					235					240				
Ile	Ser	Ser	Ser	Pro	Leu	Leu	Thr	Ala	Pro	His	Lys	Leu	Gln	Gly	Thr				
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Ser	Gly	Pro	Leu	Val	Leu	Thr	Glu	Glu	Glu	Lys	Arg	Thr	Leu	Ile	Ala				
		260						265					270						
Glu	Gly	Tyr	Pro	Ile	Pro	Thr	Lys	Leu	Pro	Leu	Thr	Lys	Ser	Glu	Glu				
	275						280					285							
Lys	Ala	Leu	Lys	Lys	Ile	Arg	Arg	Lys	Ile	Lys	Asn	Lys	Ile	Ser	Ala				
	290					295					300								
Gln	Glu	Ser	Arg	Arg	Lys	Lys	Lys	Glu	Tyr	Met	Asp	Ser	Leu	Glu	Lys				
305					310					315					320				
Lys	Val	Glu	Ser	Cys	Ser	Thr	Glu	Asn	Leu	Glu	Leu	Arg	Lys	Lys	Val				
				325					330					335					
Glu	Thr	Leu	Glu	Asn	Ala	Asn	Ser	Phe	Ser	Ser	Gly	Ile	Gln	Pro	Leu				
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<210> 5469

<211> 1292

<212> DNA

<213> Homo sapiens

<400> 5469

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acggagttta cccaggtggt gcagcatgac acggcctgta ccatcgagc cacggccagc
180
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600
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660

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gaagagcccg gctgggagga ggaggaagag gagctcatgg gcatttcacc catatctcca
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<210> 5470

<211> 427

<212> PRT

<213> Homo sapiens

<400> 5470

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Trp	Leu	Gln	Gln	Ser	Tyr	Gln	Ala	Val	Lys	Glu	Lys	Ser	Ser	Glu	Ala
		20						25					30		
Leu	Glu	Phe	Met	Lys	Arg	Asp	Leu	Thr	Glu	Phe	Thr	Gln	Val	Val	Gln
		35				40						45			
His	Asp	Thr	Ala	Cys	Thr	Ile	Ala	Ala	Thr	Ala	Ser	Val	Val	Lys	Glu
	50				55					60					
Lys	Leu	Ala	Thr	Glu	Gly	Ser	Ser	Gly	Ala	Thr	Glu	Lys	Met	Lys	Lys
65				70				75						80	
Gly	Leu	Ser	Asp	Phe	Leu	Gly	Val	Ile	Ser	Asp	Thr	Phe	Ala	Pro	Ser
		85						90						95	
Pro	Asp	Lys	Thr	Ile	Asp	Cys	Asp	Val	Ile	Thr	Leu	Met	Gly	Thr	Pro
		100						105					110		
Ser	Gly	Thr	Ala	Glu	Pro	Tyr	Asp	Gly	Thr	Lys	Ala	Arg	Leu	Tyr	Ser
		115					120					125			
Leu	Gln	Ser	Asp	Pro	Ala	Thr	Tyr	Cys	Asn	Glu	Pro	Asp	Gly	Pro	Pro
		130				135					140				
Glu	Leu	Phe	Asp	Ala	Trp	Leu	Ser	Gln	Phe	Cys	Leu	Glu	Glu	Lys	Lys
145				150					155					160	
Gly	Glu	Ile	Ser	Glu	Leu	Leu	Val	Gly	Ser	Pro	Ser	Ile	Arg	Ala	Leu
			165					170						175	
Tyr	Thr	Lys	Met	Val	Pro	Ala	Ala	Val	Ser	His	Ser	Glu	Phe	Trp	His
		180						185					190		
Arg	Tyr	Phe	Tyr	Lys	Val	His	Gln	Leu	Glu	Gln	Glu	Gln	Ala	Arg	Arg

	195		200		205	
Asp	Ala	Leu	Lys	Gln	Arg	Ala
	210		215		220	
Trp	Glu	Glu	Glu	Glu	Glu	Leu
225			230		235	
Lys	Glu	Ala	Lys	Val	Pro	Val
			245		250	
Glu	Pro	Gly	Pro	Gln	Ser	Pro
			260		265	
Glu	Pro	Pro	Ala	Glu	Val	Thr
			275		280	
Leu	Val	Thr	Gln	Ile	Ala	Asn
			290		295	
Leu	Pro	Lys	Asp	Leu	Ser	Gln
305			310		315	
Gln	Gly	Leu	Ala	Val	Asp	Val
			325		330	
His	Ser	Lys	Pro	Leu	Thr	Pro
			340		345	
Arg	Pro	Pro	Ala	Arg	Val	Glu
			355		360	
Leu	Arg	Val	Phe	Glu	Leu	Asn
			370		375	
Asn	Asn	Gly	Lys	Lys	Gly	Ser
385			390		395	
Lys	Asp	Phe	Asp	Leu	Asp	Met
			405		410	
Ser	Lys	Val	Asp	Ala	Ser	Gly
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<210> 5471

<211> 534

<212> DNA

<213> Homo sapiens

<400> 5471

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120

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180

gacacgaatg ttagctatg tgcgagtga cacggagtgg tgagtgcagg gacccaggc
240

cgccctgcgt cgggtgcgag ggcataatagg ggcgtgcacg cagtcttgga ggtgtgtgca
300

cagagcccc ggcacccgcg tgtgtgcaaa gacacaggaa cccgtctgcg tggcgctgtg
360

tgtgcaaccc aaggaggtgg gcgcttgga tccaaagtgt gcgcttatcc ggatgtggat
420

gtgggggcag ccggggacag ggctgggtgt gcgtgactcg ggtgtgccg gaccacaga
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534

<210> 5472
 <211> 161
 <212> PRT
 <213> Homo sapiens

<400> 5472
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 35 40 45
 Phe Leu Cys Leu Cys Thr His Ala Gly Ala Gly Gly Ser Val His Thr
 50 55 60
 Pro Pro Arg Leu Arg Ala Arg Pro Tyr Met Pro Cys Ala Pro Thr Gln
 65 70 75 80
 Ala Gly Leu Gly Ser Leu His Ser Pro Leu Arg Val His Ser His Ile
 85 90 95
 Ala Thr His Ser Cys Pro His Lys Leu Val Ser Leu Tyr Ser Ala His
 100 105 110
 Gly His Thr Cys Ala Pro His Leu Ala Thr Arg Thr Pro Gly Leu Cys
 115 120 125
 Ile Pro His Pro Gly Ser Gly Pro Arg Val Val Gly Pro Ala Gly Ser
 130 135 140
 Ala Ala Ala Ser Ala Arg Thr Val Leu Phe Leu Arg Pro Arg Gly Ala
 145 150 155 160
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<210> 5473
 <211> 691
 <212> DNA
 <213> Homo sapiens

<400> 5473
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 180
 aggcagcatg aggtagaatg gcaaacctac cagggtattc tgaagaagac aagagtcattg
 240
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 360
 cactattctt tctccatcac caggaatccg gtcaataatg agttcggcta tagcttattt
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 480
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 540

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<210> 5474

<211> 139

<212> PRT

<213> Homo sapiens

<400> 5474

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Ser	Asn	His	Thr	Ile	Trp	Phe	Gly	His	Phe	Thr	Thr	Ser	Thr	Ile	Leu
			20				25						30		
Ser	Pro	Ser	Pro	Gly	Ile	Arg	Ser	Ile	Met	Ser	Ser	Ala	Ile	Ala	Tyr
		35				40					45				
Leu	Cys	Gly	His	Leu	His	Thr	Leu	Gly	Gly	Leu	Met	Pro	Val	Leu	His
	50					55				60					
Thr	Arg	His	Phe	Gln	Gly	Thr	Leu	Glu	Leu	Glu	Val	Gly	Asp	Trp	Lys
65				70					75					80	
Asp	Asn	Arg	Arg	Tyr	Arg	Ile	Phe	Ala	Phe	Asp	His	Asp	Leu	Phe	Ser
			85					90						95	
Phe	Ala	Asp	Leu	Ile	Phe	Gly	Lys	Trp	Pro	Val	Val	Leu	Ile	Thr	Asn
			100				105					110			
Pro	Lys	Ser	Leu	Leu	Tyr	Ser	Cys	Gly	Glu	His	Glu	Pro	Leu	Glu	Arg
		115					120					125			
Leu	Leu	His	Ser	Thr	His	Ile	Arg	Leu	Val	Thr					
		130					135								

<210> 5475

<211> 628

<212> DNA

<213> Homo sapiens

<400> 5475

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 aacaaccccc acgccagcta cagcgccctt ccgccagtga gtcctccga cagcgaggcc
 180
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 240
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 300
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 360
 gtctcgaaac gagcccgaaa ggccctccagc gacctggatc aggccagcgt gtcccatcc
 420
 gaagaggaga actcggaaaag ctcattctgag tcggagaaga ccagcgacca ggacttcaca
 480

cctgagaaga aagcagcggg cggggcgcca cggagggggc ctctgggggg acggaaaaaa
 540
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 628

<210> 5476

<211> 209

<212> PRT

<213> Homo sapiens

<400> 5476

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Asp	Lys	Cys	Lys	Asp	Lys	Tyr	Gly	Lys	Pro	Asn	Lys	Arg	Lys	Gly	Phe
		20					25						30		
Asn	Glu	Gly	Leu	Trp	Glu	Ile	Gln	Asn	Asn	Pro	His	Ala	Ser	Tyr	Ser
		35				40						45			
Ala	Pro	Pro	Pro	Val	Ser	Ser	Ser	Asp	Ser	Glu	Ala	Pro	Glu	Ala	Asn
	50					55				60					
Pro	Ala	Asp	Gly	Ser	Asp	Ala	Asp	Glu	Asp	Asp	Glu	Asp	Arg	Gly	Val
65					70				75					80	
Met	Ala	Val	Thr	Ala	Val	Thr	Ala	Thr	Ala	Ala	Ser	Asp	Arg	Met	Glu
			85					90						95	
Ser	Asp	Ser	Asp	Ser	Asp	Lys	Ser	Ser	Asp	Asn	Ser	Gly	Leu	Lys	Arg
		100					105						110		
Lys	Thr	Pro	Ala	Leu	Lys	Met	Ser	Val	Ser	Lys	Arg	Ala	Arg	Lys	Ala
		115					120						125		
Ser	Ser	Asp	Leu	Asp	Gln	Ala	Ser	Val	Ser	Pro	Ser	Glu	Glu	Glu	Asn
		130				135						140			
Ser	Glu	Ser	Ser	Ser	Glu	Ser	Glu	Lys	Thr	Ser	Asp	Gln	Asp	Phe	Thr
145					150					155				160	
Pro	Glu	Lys	Lys	Ala	Ala	Val	Arg	Ala	Pro	Arg	Arg	Gly	Pro	Leu	Gly
			165					170						175	
Gly	Arg	Lys	Lys	Lys	Lys	Ala	Pro	Ser	Ala	Ser	Asp	Ser	Asp	Ser	Lys
		180					185					190			
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<210> 5477

<211> 727

<212> DNA

<213> Homo sapiens

<400> 5477

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 120
 gggcccttct cactgagctc gtgaagtgcc tcagtcaagg caaggtcccc tgggccatat
 180

gggccccccc gcccatgggg ttgggctggg ccttatagtg cctacgttag tctgtgtgga
 240
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 360
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 420
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 480
 gagtctctct cgaagcccat gagctgggtca ctgttgccgt cgccttcctc ctcttctctt
 540
 tcctcctcaa actccagatc ctggcctagt agcaaatac tctccaatac caggggccccg
 600
 ggtccttcgt cgagggagtc ttcagtatcc actttgaccc cctcgcatth caggggctgc
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 gcggccg
 727

<210> 5478

<211> 99

<212> PRT

<213> Homo sapiens

<400> 5478

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Pro	Trp	Gly	Trp	Ala	Gly	Pro	Tyr	Ser	Ala	Tyr	Val	Ser	Leu	Cys	Gly
		20						25					30		
Ala	Pro	Gly	Gln	Arg	Gly	Arg	Lys	Arg	Trp	Leu	Leu	Val	Arg	Leu	Tyr
		35					40					45			
Lys	Thr	Trp	Pro	Leu	Thr	Cys	Arg	Pro	Pro	Thr	Gln	Leu	Ala	Gly	Trp
		50				55					60				
Ala	Gly	Leu	Ser	Pro	Leu	Ala	Ser	Pro	Gly	Pro	Leu	Ala	Gly	Ser	Ser
65					70					75				80	
Thr	Ser	Leu	Ser	Ala	Leu	Ser	Ala	Arg	Pro	Pro	Pro	Asp	Ser	Ser	Ser
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Leu Ser Pro

<210> 5479

<211> 1386

<212> DNA

<213> Homo sapiens

<400> 5479

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 180

cggaggcggg aggagcagga ggcacgagag aaggcgcagg ccgagcagga ggagcaggag
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 720
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 780
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<210> 5480

<211> 251

<212> PRT

<213> Homo sapiens

<400> 5480

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		20					25						30		
Leu	Gln	Ala	Glu	Arg	Asp	Lys	Arg	Met	Arg	Glu	Glu	Gln	Leu	Ala	Arg

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 Glu Gln Glu Ala Arg Glu Lys Ala Gln Ala Glu Gln Glu Glu Gln Glu
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 Arg Leu Gln Lys Gln Lys Glu Glu Ala Glu Ala Arg Ser Arg Glu Glu
 85 90 95
 Ala Glu Arg Gln Arg Leu Glu Arg Glu Lys His Phe Gln Gln Gln Glu
 100 105 110
 Gln Glu Arg Gln Glu Arg Arg Lys Arg Leu Glu Glu Ile Met Lys Arg
 115 120 125
 Thr Arg Lys Ser Glu Val Ser Glu Thr Lys Gln Lys Gln Asp Ser Lys
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 Glu Ala Asn Ala Asn Gly Ser Ser Pro Glu Pro Val Lys Ala Val Glu
 145 150 155 160
 Ala Arg Ser Pro Gly Leu Gln Lys Glu Ala Val Gln Lys Glu Glu Pro
 165 170 175
 Ile Pro Gln Glu Pro Gln Trp Ser Leu Pro Ser Lys Glu Leu Pro Ala
 180 185 190
 Ser Leu Val Asn Gly Leu Gln Pro Leu Pro Ala His Gln Glu Asn Gly
 195 200 205
 Phe Ser Thr Asn Gly Pro Ser Gly Asp Lys Ser Leu Ser Arg Thr Pro
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<210> 5481
 <211> 1513
 <212> DNA
 <213> Homo sapiens

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<210> 5482

<211> 188

<212> PRT

<213> Homo sapiens

<400> 5482

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		20						25					30		
Leu	Arg	Asn	Pro	Ser	Ala	Ala	Phe	Phe	Cys	Val	Ala	Arg	Leu	Gln	Asp
		35					40					45			
Phe	Lys	Leu	Asp	Phe	Gly	Asn	Ser	Gln	Gly	Lys	Thr	Ser	Gln	Thr	Trp
	50					55					60				
His	Gly	Gly	Ile	Ala	Thr	Ile	Phe	Gln	Ser	Pro	Gly	Asp	Glu	Leu	Trp
65					70					75				80	
Gly	Val	Val	Trp	Lys	Met	Asn	Lys	Ser	Asn	Leu	Asn	Ser	Leu	Asp	Glu
				85					90					95	
Gln	Glu	Gly	Val	Lys	Ser	Gly	Met	Tyr	Val	Val	Ile	Glu	Val	Lys	Val
			100					105					110		
Ala	Thr	Gln	Glu	Gly	Lys	Glu	Ile	Thr	Cys	Arg	Ser	Tyr	Leu	Met	Thr

115	120	125
Asn Tyr Glu Ser Ala Pro Pro Ser Pro Gln Tyr Lys Lys Ile Ile Cys		
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Met Gly Ala Lys Glu Asn Gly Leu Pro Leu Glu Tyr Gln Glu Lys Leu		
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Lys Ala Ile Glu Pro Asn Asp Tyr Thr Gly Lys Val Ser Glu Glu Ile		
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Glu Asp Ile Ile Lys Lys Gly Glu Thr Gln Thr Leu		
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<210> 5483

<211> 1552

<212> DNA

<213> Homo sapiens

<400> 5483

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 720
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 aacctatgtg agtcctcact catgagccag cactgggaca tggtagctc ttgaggaccc
 1080
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 1140

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 1440
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<210> 5484

<211> 357

<212> PRT

<213> Homo sapiens

<400> 5484

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 35 40 45
 Glu Leu Arg Gly Gly Phe Asp Trp Ser Leu His Phe Gln Trp Glu Gln
 50 55 60
 Leu Ser Pro Glu Gln Lys Ala Arg Arg Leu Asp Pro Thr Glu Pro Ile
 65 70 75 80
 Arg Thr Pro Ile Ile Ala Gly Gly Leu Phe Val Ile Asp Lys Ala Trp
 85 90 95
 Phe Asp Tyr Leu Gly Lys Tyr Asp Met Asp Met Asp Ile Trp Gly Gly
 100 105 110
 Glu Asn Phe Glu Ile Ser Phe Arg Val Trp Met Cys Gly Gly Ser Leu
 115 120 125
 Glu Ile Val Pro Cys Ser Arg Val Gly His Val Phe Arg Lys Lys His
 130 135 140
 Pro Tyr Val Phe Pro Asp Gly Asn Ala Asn Thr Tyr Ile Lys Asn Thr
 145 150 155 160
 Lys Arg Thr Ala Glu Val Trp Met Asp Glu Tyr Lys Gln Tyr Tyr Tyr
 165 170 175
 Ala Ala Arg Pro Phe Ala Leu Glu Arg Pro Phe Gly Asn Val Glu Ser
 180 185 190
 Arg Leu Asp Leu Arg Lys Asn Leu Arg Cys Gln Ser Phe Lys Trp Tyr
 195 200 205
 Leu Glu Asn Ile Tyr Pro Glu Leu Ser Ile Pro Lys Glu Phe Ser Ile
 210 215 220
 Gln Lys Gly Asn Ile Arg Gln Arg Gln Lys Cys Leu Glu Ser Gln Arg
 225 230 235 240
 Gln Asn Asn Gln Glu Thr Pro Asn Leu Lys Leu Ser Pro Cys Ala Lys
 245 250 255
 Val Lys Gly Glu Asp Ala Lys Ser Gln Val Trp Ala Phe Thr Tyr Thr

	260		265		270
Gln Lys Ile Leu Gln Glu Glu Leu Cys Leu Ser Val Ile Thr Leu Phe					
	275		280		285
Pro Gly Ala Pro Val Val Leu Val Leu Cys Lys Asn Gly Asp Asp Arg					
	290		295		300
Gln Gln Trp Thr Lys Thr Gly Ser His Ile Glu His Ile Ala Ser His					
305		310		315	320
Leu Cys Leu Asp Thr Asp Met Phe Gly Asp Gly Thr Glu Asn Gly Lys					
	325		330		335
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<210> 5485

<211> 1549

<212> DNA

<213> Homo sapiens

<400> 5485

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 1020

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<210> 5486

<211> 290

<212> PRT

<213> Homo sapiens

<400> 5486

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		20						25					30		
Arg	Ser	Arg	Ser	Arg	Ser	Phe	Ser	Arg	Ser	Ser	Arg	Ser	His	Ser	Arg
		35					40					45			
Val	Ser	Ser	Arg	Phe	Ser	Ser	Arg	Ser	Arg	Arg	Ser	Lys	Ser	Arg	Ser
	50					55					60				
Arg	Ser	Arg	Arg	Arg	His	Gln	Arg	Lys	Tyr	Arg	Arg	Tyr	Ser	Arg	Ser
65					70				75					80	
Tyr	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Arg	Tyr	Arg	Glu	Arg
			85					90						95	
Arg	Tyr	Gly	Phe	Thr	Arg	Arg	Tyr	Tyr	Arg	Ser	Pro	Ser	Arg	Tyr	Arg
			100					105					110		
Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Gly	Arg	Ser	Tyr	Cys	Gly
		115					120					125			
Arg	Ala	Tyr	Ala	Ile	Ala	Arg	Gly	Gln	Arg	Tyr	Tyr	Gly	Phe	Gly	Arg
	130					135					140				
Thr	Val	Tyr	Pro	Glu	Glu	His	Ser	Arg	Trp	Arg	Asp	Arg	Ser	Arg	Thr
145					150					155					160
Arg	Ser	Arg	Ser	Arg	Thr	Pro	Phe	Arg	Leu	Ser	Glu	Lys	Asp	Arg	Met
			165					170					175		
Glu	Leu	Leu	Glu	Ile	Ala	Lys	Thr	Asn	Ala	Ala	Lys	Ala	Leu	Gly	Thr
			180					185					190		
Thr	Asn	Ile	Asp	Leu	Pro	Ala	Ser	Leu	Arg	Thr	Val	Pro	Ser	Ala	Lys
	195						200					205			
Glu	Thr	Ser	Arg	Gly	Ile	Gly	Val	Ser	Ser	Asn	Gly	Ala	Lys	Pro	Glu
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<210> 5487
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<212> DNA
<213> Homo sapiens
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1140

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<210> 5488

<211> 272

<212> PRT

<213> Homo sapiens

<400> 5488

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			20					25					30		
Gly	Phe	Trp	Arg	Pro	Leu	Arg	Gly	Val	Asn	Val	Met	Ile	Met	Gly	Ala
		35					40					45			
Gly	Pro	Ala	His	Ala	Met	Tyr	Phe	Ala	Cys	Tyr	Glu	Asn	Met	Lys	Arg
		50				55					60				
Thr	Leu	Asn	Asp	Val	Phe	His	His	Gln	Gly	Asn	Ser	His	Leu	Ala	Asn
					70					75				80	
Gly	Ile	Ala	Gly	Ser	Met	Ala	Thr	Leu	Leu	His	Asp	Ala	Val	Met	Asn
				85					90					95	
Pro	Ala	Glu	Val	Val	Lys	Gln	Arg	Leu	Gln	Met	Tyr	Asn	Ser	Gln	His
			100					105					110		
Arg	Ser	Ala	Ile	Ser	Cys	Ile	Arg	Thr	Val	Trp	Arg	Thr	Glu	Gly	Leu
			115				120					125			
Gly	Ala	Phe	Tyr	Arg	Ser	Tyr	Thr	Thr	Gln	Leu	Thr	Met	Asn	Ile	Pro
			130			135					140				
Phe	Gln	Ser	Ile	His	Phe	Ile	Thr	Tyr	Glu	Phe	Leu	Gln	Glu	Gln	Val
					150					155				160	
Asn	Pro	His	Arg	Thr	Tyr	Asn	Pro	Gln	Ser	His	Ile	Ile	Ser	Gly	Gly
				165					170					175	
Leu	Ala	Gly	Ala	Leu	Ala	Ala	Ala	Ala	Thr	Thr	Pro	Leu	Asp	Val	Cys
			180				185						190		
Lys	Thr	Leu	Leu	Asn	Thr	Gln	Glu	Asn	Val	Ala	Leu	Ser	Leu	Ala	Asn
			195				200					205			
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210		215		220	
Gln Leu Asn Gly Leu Ala Gly Tyr Phe Lys Gly Ile Gln Ala Arg Val					
225		230		235	240
Ile Tyr Gln Met Pro Ser Thr Ala Ile Ser Trp Ser Val Tyr Glu Phe					
	245		250		255
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	260		265		270

<210> 5489

<211> 1600

<212> DNA

<213> Homo sapiens

<400> 5489

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480
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<213> Homo sapiens

<400> 5494

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Cys	Pro	Ser	Cys	Phe	Tyr	Asn	Leu	Leu	Asn	Leu	Phe	Cys	Glu	Leu
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His	Phe	Leu	Tyr	Phe	Lys	Asp	Lys	Ile	Phe	Asn	Val	Ala	Ile	Pro	Arg

	260		265		270										
Phe	His	Met	Ala	Cys	Pro	Thr	Phe	Arg	Val	Ser	Ile	Ala	Arg	Leu	Glu
	275		280		285										
Met	Gly	Pro	Asp	Glu	Tyr	Glu	Glu	Met	Glu	Glu	Glu	Glu	Glu	Glu	Glu
	290		295		300										
Glu	Glu	Glu	Asp	Glu	Asp	Asp	Asp	Ser	Ala	Asp	Met	Asp	Glu	Ser	Asp
305			310		315										320
Glu	Asp	Asp	Glu	Glu	Glu	Arg	Arg	Arg	Arg	Val	Phe	Asp	Val	Pro	Ile
			325		330										335
Arg	Arg	Arg	Arg	Cys	Ser	Arg	Leu	Phe							
	340		345												

<210> 5497

<211> 1056

<212> DNA

<213> Homo sapiens

<400> 5497

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 120
 tgactatggg tggactcggg tgtagacctc tgaagctgag atcacacgaa aacctggcct
 180
 ccccgccatg tagctgttgg agagtagaaa aatagagcac gcctgatgtt tctaaatgag
 240
 aagactttca atagtaatga agaatccatg gcactctcct caccctcaaa cacatggcag
 300
 tcattcacat acaggcccca aagtcaactg tagtgctgca gtggctcctg tggacattgg
 360
 aaagcccgga gagggcgtgg aagaaatcag ctggcccccg gcagggttctc tgggggttttg
 420
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 480
 gcttgggttt ctggactttt ctgaggcacc ggcagagggg tctcgttgct cccttgagtg
 540
 taggggcagc cctttaacct ggctccttga gtccctgctt tttctgcttc tgttgccctc
 600
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 660
 ggccatcccc gggtgccctt gaccagcccc gtgtctcctc aggggtgtccc agcaccagcc
 720
 tggcacagag tggggctcag ttagagtatg tgggatgttg gtttcgccag gtgagtgaat
 780
 gaaaggactc gaccaccaca gctgagccac tagctgggccc atgcgaagag ttctaggtgc
 840
 aaaggctgga ggggtgaatt cttttttgag aggtgtgtga gcagcttccg acccctgccc
 900
 catttgaacg ggggccttgc tggctcgcgtc cctgcattca cccgcgcggc catccccgtc
 960
 tccaaagatt gatcctaact gagcacgccc acggccctgg tctggcctgg gcaccggcga
 1020
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 1056

<210> 5498
 <211> 150
 <212> PRT
 <213> Homo sapiens

<400> 5498
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 His Pro Pro Ala Phe Ala Pro Arg Thr Leu Arg Met Ala Gln Leu Val
 20 25 30
 Ala Gln Leu Trp Trp Ser Ser Pro Phe Ile His Ser Pro Gly Glu Thr
 35 40 45
 Asn Ile Pro His Thr Leu Thr Glu Pro His Ser Val Pro Gly Trp Cys
 50 55 60
 Trp Asp Thr Leu Arg Arg His Gly Ala Gly Gln Gly His Pro Gly Met
 65 70 75 80
 Ala Arg Ser Gly Thr Gly Glu Gly Gln Arg Glu Gly Asp Ile Glu Arg
 85 90 95
 Glu Glu Asp Glu Glu Glu Gly Asn Arg Ser Arg Lys Ser Arg Asp Ser
 100 105 110
 Arg Ser Gln Val Lys Gly Leu Pro Leu His Ser Arg Glu Gln Arg Asp
 115 120 125
 Pro Ser Ala Gly Ala Ser Glu Lys Ser Arg Asn Pro Ser Arg Met Gly
 130 135 140
 Thr Trp Gly Val Asn Phe
 145 150

<210> 5499
 <211> 1918
 <212> DNA
 <213> Homo sapiens

<400> 5499
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 120
 tgcctctgcc ctctgtagat tctctgtctgg gcctttggaa ctaacacagc aacttccagg
 180
 gtctcatgtt gaagacttta tggagcatcc tggccagaac aagccaagga gccaagacga
 240
 gagggacaca cggacaaaca acagacagaa gacgtactgg ccgctggact ccgctgcctc
 300
 ccccatctcc ccgcatctg cgcccgagg atgagcccag ccttcagggc catggatgtg
 360
 gagccccgcg ccaaaggcgt ccttctggag ccctttgtcc accaggtcgg ggggcactca
 420
 tgcgtgtcc gcttcaatga gacaacctg tgcaagcccc tggccccaa ggaacatcag
 480
 ttctacgaga cctccctgc tgagatgcgc aaattcactc ccagtacaa aggtgtggta
 540
 tctgtgcgct ttgaagaaga tgaagacagg aacttgtgtc taatagcata tccattgaaa
 600

ggggaccatg gaattgtgga cattgcacat aattcagact gtgaaccaa aagtaagctc
 660
 ctaagggtgga caacaacaa aaaacatcat gtcttagaaa cagaaaagac ccctaaggac
 720
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 780
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 840
 tcccagctta aacactataa cccttgagc atgaaatgtc accagcaaca gttacagaga
 900
 atgaaggaga atgcaaagca tcggaaccag taaaaattta tcttactgga aaacctgact
 960
 tcccgctatg aggtgccttg tgtccttgac ctcaagatgg gcacacgaca acatgggtgat
 1020
 gatgcttcag aggagaaggc agccaaccag atccgaaaat gtcagcagag cacatctgca
 1080
 gtcattggtg tgnctgtgtg tggcatgcag gtgtaccaag caggcagtggt gcagctcatg
 1140
 ttcattgaaca agtaccatgg acggaagcta tcggtgcagg gcttcaagga ggcacttttc
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 1260
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 1320
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 1380
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 1440
 cccatcgagg ccagctctgt agatgtgcgc atgatcgact ttgcacacac cacctgcagg
 1500
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 1560
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 1620
 ctgctccagt acttgagagc gactctgtgt cccaggcaca gctgtgctgc gtcagggagg
 1680
 aagccagtat ggccagggtg tggctcctgc agcctggagc tgatgtgcag tggcctctgt
 1740
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 1800
 ttcaacattc cacatttgat gatgatacct cttcttctcc tgagtgtata tgttctaata
 1860
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 1918

<210> 5500

<211> 426

<212> PRT

<213> Homo sapiens

<400> 5500

Met Ser Pro Ala Phe Arg Ala Met Asp Val Glu Pro Arg Ala Lys Gly
 1 5 10 15
 Val Leu Leu Glu Pro Phe Val His Gln Val Gly Gly His Ser Cys Val

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Leu	Arg	Phe	Asn	Glu	Thr	Thr	Leu	Cys	Lys	Pro	Leu	Val	Pro	Arg	Glu				
		35					40					45							
His	Gln	Phe	Tyr	Glu	Thr	Leu	Pro	Ala	Glu	Met	Arg	Lys	Phe	Thr	Pro				
		50				55					60								
Gln	Tyr	Lys	Gly	Val	Val	Ser	Val	Arg	Phe	Glu	Glu	Asp	Glu	Asp	Arg				
65					70					75					80				
Asn	Leu	Cys	Leu	Ile	Ala	Tyr	Pro	Leu	Lys	Gly	Asp	His	Gly	Ile	Val				
			85						90					95					
Asp	Ile	Ala	His	Asn	Ser	Asp	Cys	Glu	Pro	Lys	Ser	Lys	Leu	Leu	Arg				
			100					105					110						
Trp	Thr	Thr	Asn	Lys	Lys	His	His	Val	Leu	Glu	Thr	Glu	Lys	Thr	Pro				
			115					120					125						
Lys	Asp	Trp	Val	Arg	Gln	His	Arg	Lys	Glu	Glu	Lys	Met	Lys	Ser	His				
			130					135				140							
Lys	Leu	Glu	Glu	Glu	Phe	Glu	Trp	Leu	Lys	Lys	Ser	Glu	Val	Leu	Tyr				
145					150					155					160				
Tyr	Thr	Val	Glu	Lys	Gly	Asn	Ile	Ser	Ser	Gln	Leu	Lys	His	Tyr					
				165				170						175					
Asn	Pro	Trp	Ser	Met	Lys	Cys	His	Gln	Gln	Gln	Leu	Gln	Arg	Met	Lys				
			180					185					190						
Glu	Asn	Ala	Lys	His	Arg	Asn	Gln	Tyr	Lys	Phe	Ile	Leu	Leu	Glu	Asn				
			195					200					205						
Leu	Thr	Ser	Arg	Tyr	Glu	Val	Pro	Cys	Val	Leu	Asp	Leu	Lys	Met	Gly				
						210							220						
Thr	Arg	Gln	His	Gly	Asp	Asp	Ala	Ser	Glu	Glu	Lys	Ala	Ala	Asn	Gln				
225					230						235				240				
Ile	Arg	Lys	Cys	Gln	Gln	Ser	Thr	Ser	Ala	Val	Ile	Gly	Val	Xaa	Val				
				245					250					255					
Cys	Gly	Met	Gln	Val	Tyr	Gln	Ala	Gly	Ser	Gly	Gln	Leu	Met	Phe	Met				
			260					265					270						
Asn	Lys	Tyr	His	Gly	Arg	Lys	Leu	Ser	Val	Gln	Gly	Phe	Lys	Glu	Ala				
			275					280					285						
Leu	Phe	Gln	Phe	Phe	His	Asn	Gly	Arg	Tyr	Leu	Arg	Arg	Glu	Leu	Leu				
						290						300							
Gly	Pro	Val	Leu	Lys	Lys	Leu	Thr	Glu	Leu	Lys	Ala	Val	Leu	Glu	Arg				
305					310					315					320				
Gln	Glu	Ser	Tyr	Arg	Phe	Tyr	Ser	Ser	Ser	Leu	Leu	Val	Ile	Tyr	Asp				
				325					330					335					
Gly	Lys	Glu	Arg	Pro	Glu	Val	Val	Leu	Asp	Ser	Asp	Ala	Glu	Asp	Leu				
			340					345					350						
Glu	Asp	Leu	Ser	Glu	Glu	Ser	Ala	Asp	Glu	Ser	Ala	Gly	Ala	Tyr	Ala				
			355					360					365						
Tyr	Lys																		

<210> 5501
<211> 568

<212> DNA

<213> Homo sapiens

<400> 5501

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 120
 tgaagcgggg acaaaacccat gcagctcaga ggtccctgtg ggggctgggg gagctgccct
 180
 gcaggtcttg gcacatgcac agcaggctcc ccatagcttt gtcaccacaa agggcactgt
 240
 tctattcaca gcacctctg cttctgctg gcaactgtgt ctccctgtgc tatatttaat
 300
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 360
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 420
 cagtgccatg ggtgagccga gcagctgtga ggtgggtggg gcagggtgt agcccacgcc
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 568

<210> 5502

<211> 110

<212> PRT

<213> Homo sapiens

<400> 5502

Met	Ile	Leu	Gly	Lys	Arg	Leu	His	Leu	Asn	Phe	Arg	Tyr	Phe	Thr	Cys
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Glu	Ala	Gly	Thr	Lys	Pro	Cys	Ser	Ser	Glu	Val	Pro	Val	Gly	Ala	Gly
			20					25					30		
Gly	Ala	Ala	Leu	Gln	Val	Leu	Ala	His	Ala	Gln	Gln	Ala	Pro	His	Ser
			35				40					45			
Phe	Val	Thr	Thr	Lys	Gly	Thr	Val	Leu	Phe	Thr	Ala	Pro	Pro	Ala	Ser
	50				55					60					
Ala	Trp	Gln	Leu	Cys	Leu	Pro	Val	Leu	Tyr	Leu	Ile	Pro	Pro	Ala	Lys
65				70					75					80	
Leu	Ala	Arg	Gln	Gly	Pro	Ala	Leu	Lys	Glu	Ile	Ser	Leu	Pro	Asp	Pro
			85					90					95		
Trp	Thr	Trp	Lys	Trp	Arg	Leu	His	Val	Pro	Ala	Leu	Ala	Ala		
			100					105					110		

<210> 5503

<211> 1679

<212> DNA

<213> Homo sapiens

<400> 5503

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120
atttaatcct cacaatagtc aagctaggaa ggtaagtgtg gaattattac cccatttgat
180
aggtagacaa attaaagctt aagatcaaac cgtttgcaaa gcaggaagca gcacttcctc
240
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300
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360
tcagcccctc atgctcagga cactcagagt gaggaactgc caccctcctg caccatctca
420
ggagagaaga agccgccagc agtctctgga gaagccaccg gggctgatgc tgggagactg
480
tgcccccccc cccgctccag ggctccccac aaagacagaa ctctagcccc ctccaggccc
540
cagactcagg gggaagattg ttccctccca gtgggagagg tgaagatagg aaagaggtcc
600
tattctccag cccccgggaa gcagaaaaag cctaatacca tgggtctggc cccaacatca
660
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720
cgggggccct gccacctggc caatctcctc agtacattgg cgcagagcaa ccaaaacaga
780
gaccacaagc agggggcccc ggaagtgacc tgccaaatta ggaaaaagac acgaacccta
840
taccgctcag atcagctgga ggagctagag aagatattcc aagaagacca ctatcctgac
900
agtataaac gccgagagat tgcccagacg gtgggggtga cccccagcg catcatggta
960
aagggggccg gctcactggt ggcaggggtg agtggcggag ggcccacat tgaaacactc
1020
gaattgcaga gtgagcgctc agcggtagcc tgggtgtggt tccagaatcg ccggggccaag
1080
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1140
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1200
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1440
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1560
agaggggtta ctgagaggag cacagagtgg tacaggagat ggggatgaaa gggataaggg
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1679

<210> 5504
 <211> 392
 <212> PRT
 <213> Homo sapiens

<400> 5504
 Gln Lys Ala Gly Glu Lys Pro Leu Ala Ala Gly Pro Gly Glu Glu Glu
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 20 25 30
 Leu Pro Pro Ser Cys Thr Ile Ser Gly Glu Lys Lys Pro Pro Ala Val
 35 40 45
 Ser Gly Glu Ala Thr Gly Ala Asp Ala Gly Arg Leu Cys Pro Pro Pro
 50 55 60
 Arg Ser Arg Ala Pro His Lys Asp Arg Thr Leu Ala Arg Ser Arg Pro
 65 70 75 80
 Gln Thr Gln Gly Glu Asp Cys Ser Leu Pro Val Gly Glu Val Lys Ile
 85 90 95
 Gly Lys Arg Ser Tyr Ser Pro Ala Pro Gly Lys Gln Lys Lys Pro Asn
 100 105 110
 Ala Met Gly Leu Ala Pro Thr Ser Ser Pro Gly Ala Pro Asn Ser Ala
 115 120 125
 Arg Ala Thr His Asn Pro Val Pro Cys Gly Ser Gly Arg Gly Pro Cys
 130 135 140
 His Leu Ala Asn Leu Leu Ser Thr Leu Ala Gln Ser Asn Gln Asn Arg
 145 150 155 160
 Asp His Lys Gln Gly Pro Pro Glu Val Thr Cys Gln Ile Arg Lys Lys
 165 170 175
 Thr Arg Thr Leu Tyr Arg Ser Asp Gln Leu Glu Glu Leu Glu Lys Ile
 180 185 190
 Phe Gln Glu Asp His Tyr Pro Asp Ser Asp Lys Arg Arg Glu Ile Ala
 195 200 205
 Gln Thr Val Gly Val Thr Pro Gln Arg Ile Met Val Lys Gly Ala Gly
 210 215 220
 Ser Leu Val Ala Gly Trp Ser Gly Gly Gly Pro Thr Ile Glu Thr Leu
 225 230 235 240
 Glu Leu Gln Ser Glu Arg Ser Ala Val Ala Trp Val Trp Phe Gln Asn
 245 250 255
 Arg Arg Ala Lys Trp Arg Lys Met Glu Lys Leu Asn Gly Lys Glu Ser
 260 265 270
 Lys Asp Asn Pro Ala Ala Pro Gly Pro Ala Ser Ser Gln Cys Ser Ser
 275 280 285
 Ala Ala Glu Ile Leu Pro Ala Val Pro Met Glu Pro Lys Pro Asp Pro
 290 295 300
 Phe Pro Gln Glu Ser Pro Leu Asp Thr Phe Pro Glu Pro Pro Met Leu
 305 310 315 320
 Leu Thr Ser Asp Gln Thr Leu Ala Pro Thr Gln Pro Ser Glu Gly Ala
 325 330 335
 Gln Arg Val Val Thr Pro Pro Leu Phe Ser Pro Pro Pro Val Arg Arg
 340 345 350
 Ala Asp Leu Pro Phe Pro Leu Gly Pro Val His Thr Pro Gln Leu Met
 355 360 365
 Pro Leu Leu Met Asp Val Ala Gly Ser Asp Ser Ser His Lys Asp Gly

<400> 5506

Lys Leu Gly Arg Pro Ser Gly Ser Cys Arg Gly Gly Arg Ala Gln Leu
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 Gln Glu Gly Val Gln Lys Pro Gln Ala Met Ala Val Gly Asn Ile Asn
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 Glu Leu Pro Glu Asn Ile Leu Leu Glu Leu Phe Thr His Val Pro Ala
 35 40 45
 Arg Gln Leu Leu Leu Asn Cys Arg Leu Val Cys Ser Leu Trp Arg Asp
 50 55 60
 Leu Ile Asp Leu Val Thr Leu Trp Lys Arg Lys Cys Leu Arg Glu Gly
 65 70 75 80
 Phe Ile Thr Glu Asp Trp Asp Gln Pro Val Ala Asp Trp Lys Ile Phe
 85 90 95
 Tyr Phe Leu Arg Ser Leu His Arg Asn Leu Leu His Asn Pro Cys Ala
 100 105 110
 Glu Glu Gly Phe Glu Phe Trp Ser Leu Asp Val Asn Gly Gly Asp Glu
 115 120 125
 Trp Lys Val Glu Asp Leu Ser Arg Asp Gln Arg Lys Glu Phe Pro Asn
 130 135 140
 Asp Gln Val Lys Lys Tyr Phe Val Thr Ser Tyr Tyr Thr Cys Leu Lys
 145 150 155 160
 Ser Gln Val Val Asp Leu Lys Ala Glu Gly Tyr Trp Glu Glu Leu Leu
 165 170 175
 Asp Thr Phe Arg Pro Asp Ile Val Val Lys Asp Trp Phe Ala Ala Arg
 180 185 190
 Ala Asp Cys Gly Cys Thr Tyr Gln Leu Lys Val Gln Leu Leu Ser Ala
 195 200 205
 Asp Tyr Phe Val Leu Ala Ser Phe Glu Pro Asp Pro Ala Thr Ile Gln
 210 215 220
 Gln Lys Ser Asp Ala Lys Trp Arg Glu Val Ser His Thr Phe Ser Asn
 225 230 235 240
 Tyr Pro Pro Gly Val Arg Tyr Ile Trp Phe Gln His Gly Gly Val Asp
 245 250 255
 Thr His Tyr Trp Ala Gly Trp Tyr Gly Pro Arg Val Thr Asn Ser Ser
 260 265 270
 Ile Thr Ile Gly Pro Pro Leu Pro
 275 280

<210> 5507

<211> 1658

<212> DNA

<213> Homo sapiens

<400> 5507

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 120
 aagcaatttc tcacctttga caaacagggtc cttcgattct atgcaatctg ggatgatata
 180
 gacagcatgt atggtgaatg tcggacctac atcattcatt actatcttat ggatgatacg
 240
 gtggaaattc gagagggtcca cgaacggaat gatgggagag atcctttccc actcctaagt
 300

aaccgccagc gtgtgcccac agttttgggtg gaaaatgcaa agaacttccc tcagtgtgtg
360
ctagaaatct ctgaccaaga agtggttgaa tggatatactg ctaaagactt cattgttggg
420
aagtcactca ctatccttgg gagaactttc ttcatttatg attgtgatcc atttactcga
480
cgggtattaca aagagaagtt tggaatcact gatttaccac gtattgatgt gagcaagcgg
540
gaaccacctc cagtaaaaca ggagttgcct ccttataacg gttttggact agtgggaagat
600
tctgtcagca attgttttgc tctcattcca aaagctccaa aaaaagacgt tattaaaatg
660
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720
gacaaagacc gcagatttgt cttctcttac tttctagcta ccgacatgat cagtatcttt
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gagcctcctg ttcgcaattc tggatcatt gggggcaagt accttggcag gactaaagtt
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960
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1020
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gatccaggcg tgcaggaatt ggaagcatta atagacacaa ttcagaagca actgaaagat
1140
cactcatgca aagacaacat tcgtgaggca tttcaaattt atgacaagga agcttcagga
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1260
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1320
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1380
tacttggaact atgctttgaa atacacctta cactcttcat agaggcattt acagggttcc
1440
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1500
atctaatagg atctaagatt ggtgccttat ttaggggtgat aggggtatag caatgtctaa
1560
ttttgtgtgt caaattgact tggccacagc gggcccaaatt atttcctttc tttcttttta
1620
aaaaaataaa ttttttttga gatgggaaaa aaaaaaaa
1658

<210> 5508

<211> 448

<212> PRT

<213> Homo sapiens

<400> 5508

Xaa Leu Glu Ser Gln Gly Ile Glu Leu Asn Pro Pro Glu Lys Met Ala

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Thr Pro Ser Asp Phe Asp Gln Leu Lys Gln Phe Leu Thr Phe Asp Lys			
35	40	45	
Gln Val Leu Arg Phe Tyr Ala Ile Trp Asp Asp Thr Asp Ser Met Tyr			
50	55	60	
Gly Glu Cys Arg Thr Tyr Ile Ile His Tyr Tyr Leu Met Asp Asp Thr			
65	70	75	80
Val Glu Ile Arg Glu Val His Glu Arg Asn Asp Gly Arg Asp Pro Phe			
85	90	95	
Pro Leu Leu Met Asn Arg Gln Arg Val Pro Lys Val Leu Val Glu Asn			
100	105	110	
Ala Lys Asn Phe Pro Gln Cys Val Leu Glu Ile Ser Asp Gln Glu Val			
115	120	125	
Leu Glu Trp Tyr Thr Ala Lys Asp Phe Ile Val Gly Lys Ser Leu Thr			
130	135	140	
Ile Leu Gly Arg Thr Phe Phe Ile Tyr Asp Cys Asp Pro Phe Thr Arg			
145	150	155	160
Arg Tyr Tyr Lys Glu Lys Phe Gly Ile Thr Asp Leu Pro Arg Ile Asp			
165	170	175	
Val Ser Lys Arg Glu Pro Pro Pro Val Lys Gln Glu Leu Pro Pro Tyr			
180	185	190	
Asn Gly Phe Gly Leu Val Glu Asp Ser Ala Gln Asn Cys Phe Ala Leu			
195	200	205	
Ile Pro Lys Ala Pro Lys Lys Asp Val Ile Lys Met Leu Val Asn Asp			
210	215	220	
Asn Lys Val Leu Arg Tyr Leu Ala Val Leu Glu Ser Pro Ile Pro Glu			
225	230	235	240
Asp Lys Asp Arg Arg Phe Val Phe Ser Tyr Phe Leu Ala Thr Asp Met			
245	250	255	
Ile Ser Ile Phe Glu Pro Pro Val Arg Asn Ser Gly Ile Ile Gly Gly			
260	265	270	
Lys Tyr Leu Gly Arg Thr Lys Val Val Lys Pro Tyr Ser Thr Val Asp			
275	280	285	
Asn Pro Val Tyr Tyr Gly Pro Ser Asp Phe Phe Ile Gly Ala Val Ile			
290	295	300	
Glu Val Phe Gly His Arg Phe Ile Ile Leu Asp Thr Asp Glu Tyr Val			
305	310	315	320
Leu Lys Tyr Met Glu Ser Asn Ala Ala Gln Tyr Ser Pro Glu Ala Leu			
325	330	335	
Ala Ser Ile Gln Asn His Val Arg Lys Arg Glu Ala Pro Ala Pro Glu			
340	345	350	
Ala Glu Ser Lys Gln Thr Glu Lys Asp Pro Gly Val Gln Glu Leu Glu			
355	360	365	
Ala Leu Ile Asp Thr Ile Gln Lys Gln Leu Lys Asp His Ser Cys Lys			
370	375	380	
Asp Asn Ile Arg Glu Ala Phe Gln Ile Tyr Asp Lys Glu Ala Ser Gly			
385	390	395	400
Tyr Val Asp Arg Asp Met Phe Phe Lys Ile Cys Glu Ser Leu Asn Val			
405	410	415	
Pro Val Asp Asp Ser Leu Val Lys Glu Leu Ile Arg Met Cys Ser His			
420	425	430	
Gly Glu Gly Lys Ile Asn Tyr Tyr Asn Phe Val Arg Ala Phe Ser Asn			

435

440

445

<210> 5509

<211> 818

<212> DNA

<213> Homo sapiens

<400> 5509

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120
ctatgtgaga ggaagtaagt atacacagcg taagaggtgt gataaccaag tcatagaaga
180
aatgtttgga gaacatggaa tcatgtgaac ttattatgtg gtaagtacag ataccagggg
240
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300
atgtggcttt caacttcacc ctacaggaaa ggtagtcaat gtggagaagc cttcagccag
360
attccaggtc ataattctgaa taagaaaacg cctcctggag taaagccacc tgaaagccat
420
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480
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540
gggaatgcct ttcgttttca ccactccttt cacatacacg aaaggcctca cagtggagaa
600
aacctctatg aatgttagga atttcagaaa acattcactt ccccccaaa ccttcaaaga
660
tgtgaaaatg catagtggag atggacctta caaatgcaag gtgggtagga aaacctttga
720
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818

<210> 5510

<211> 105

<212> PRT

<213> Homo sapiens

<400> 5510

Met Trp Leu Ser Thr Ser Pro Tyr Arg Lys Gly Ser Gln Cys Gly Glu
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Ala Phe Ser Gln Ile Pro Gly His Asn Leu Asn Lys Lys Thr Pro Pro
20 25 30
Gly Val Lys Pro Pro Glu Ser His Val Cys Gly Glu Val Gly Val Gly
35 40 45
Tyr Pro Ser Thr Glu Arg His Ile Arg Asp Arg Leu Gly Arg Lys Pro
50 55 60
Cys Glu Tyr Gln Glu Cys Arg Gln Lys Ala Tyr Thr Cys Lys Pro Cys
65 70 75 80
Gly Asn Ala Phe Arg Phe His His Ser Phe His Ile His Glu Arg Pro

85 90 95
 His Ser Gly Glu Asn Leu Tyr Glu Cys
 100 105

<210> 5511
 <211> 379
 <212> DNA
 <213> Homo sapiens

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 120
 ctctgctgag ttgctgagag tctgtgttcc tctctccact tataggatgg gtcctcatct
 180
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 240
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 379

<210> 5512
 <211> 101
 <212> PRT
 <213> Homo sapiens

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 20 25 30
 Val Ser Ala Leu Gly Leu Glu Ala Gln Glu Asp Glu Asp Pro Ser Tyr
 35 40 45
 Lys Trp Arg Glu Glu His Arg Leu Ser Ala Thr Gln Gln Ser Glu Leu
 50 55 60
 Arg Asp Val Cys Asp Tyr Ala Ile Glu Thr Met Pro Ser Phe Pro Lys
 65 70 75 80
 Glu Gly Ser Ala Asp Val Glu Pro Asn Gln Glu Ser Leu Val Ala Glu
 85 90 95
 Ala Cys Asp Thr Pro
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<210> 5513
 <211> 837
 <212> DNA
 <213> Homo sapiens

<400> 5513
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120
agactcgggg agccattgac catcgtctct gaggatggag actggtggac ggtgctgtct
180
gaagtctcag gcagagagta taacatcccc agcgtccacg tggccaaagt ctcccatggg
240
tggctgtatg agggcctgag caggagagaaa gcagaggacc tgctgttggt acctgggaac
300
cctggagggg ccttcctcat ccgggagagc cagaccagga gaggtcttta ctctctgtca
360
gtccgcctca gccgcctgc atcctgggac cggatcagac actacaggat ccactgcctt
420
gacaatggct ggctgtacat ctaccgcgc ctacacttcc cctcactcca ggcctgggtg
480
gaccattact ctgagctggc ggatgacatc tgctgcctac tcaaggagcc ctgtgtcctg
540
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ccactcaact ggaaagagct ggacagctcc ctctgtttt ctgaagctgc cacaggggag
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gagtctcttc tcagtggagg tctccgggag tccctcagct tctacatcag cctgaatgac
720
gaggctgtct ctttggatga tgcctaggcc caaaggagag gccaaaaggg aaaccaaggc
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837

<210> 5514

<211> 248

<212> PRT

<213> Homo sapiens

<400> 5514

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Ala	Glu	Arg	Ser	Lys	Ala	Thr	Ala	Ala	Leu	Gly	Ser	Phe	Pro	Ala	
			20				25					30			
Gly	Gly	Pro	Ala	Glu	Leu	Ser	Leu	Arg	Leu	Gly	Glu	Pro	Leu	Thr	Ile
		35				40					45				
Val	Ser	Glu	Asp	Gly	Asp	Trp	Trp	Thr	Val	Leu	Ser	Glu	Val	Ser	Gly
	50				55					60					
Arg	Glu	Tyr	Asn	Ile	Pro	Ser	Val	His	Val	Ala	Lys	Val	Ser	His	Gly
65			70					75						80	
Trp	Leu	Tyr	Glu	Gly	Leu	Ser	Arg	Glu	Lys	Ala	Glu	Asp	Leu	Leu	Leu
			85					90					95		
Leu	Pro	Gly	Asn	Pro	Gly	Gly	Ala	Phe	Leu	Ile	Arg	Glu	Ser	Gln	Thr
		100					105					110			
Arg	Arg	Gly	Ser	Tyr	Ser	Leu	Ser	Val	Arg	Leu	Ser	Arg	Pro	Ala	Ser
		115				120					125				
Trp	Asp	Arg	Ile	Arg	His	Tyr	Arg	Ile	His	Cys	Leu	Asp	Asn	Gly	Trp
	130				135					140					
Leu	Tyr	Ile	Ser	Pro	Arg	Leu	Thr	Phe	Pro	Ser	Leu	Gln	Ala	Leu	Val
145				150					155					160	
Asp	His	Tyr	Ser	Glu	Leu	Ala	Asp	Asp	Ile	Cys	Cys	Leu	Leu	Lys	Glu

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                165                170                175
Pro Cys Val Leu Gln Arg Ala Gly Pro Leu Pro Gly Lys Asp Ile Pro
                180                185                190
Leu Pro Val Thr Val Gln Arg Thr Pro Leu Asn Trp Lys Glu Leu Asp
                195                200                205
Ser Ser Leu Leu Phe Ser Glu Ala Ala Thr Gly Glu Glu Ser Leu Leu
                210                215                220
Ser Glu Gly Leu Arg Glu Ser Leu Ser Phe Tyr Ile Ser Leu Asn Asp
225                230                235                240
Glu Ala Val Ser Leu Asp Asp Ala
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<210> 5515
 <211> 420
 <212> DNA
 <213> Homo sapiens

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<400> 5515
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120
aagcttcagc tacaagccct tgagcaagag cacaagaagc tggctgcccg ccttgaggaa
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240
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420

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<210> 5516
 <211> 120
 <212> PRT
 <213> Homo sapiens

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<400> 5516
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Lys Lys Met Gln Glu Arg Met Ser Ala Gln Leu Ala Ala Ala Glu Ser
20          25          30
Arg Gln Lys Lys Leu Glu Met Glu Lys Leu Gln Leu Gln Ala Leu Glu
35          40          45
Gln Glu His Lys Lys Leu Ala Ala Arg Leu Glu Glu Glu Arg Gly Lys
50          55          60
Asn Lys Gln Val Val Leu Met Leu Val Lys Glu Cys Lys Gln Leu Ser
65          70          75          80
Ser Lys Val Ile Glu Glu Ala Gln Lys Leu Glu Asp Val Met Ala Lys
85          90          95
Leu Ala Ser Ser Leu Cys His Gln His Leu Leu His Ser Leu Ser Gly
100         105         110
Val Pro Gly Thr Gly His Ile Asp

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115

120

<210> 5517

<211> 804

<212> DNA

<213> Homo sapiens

<400> 5517

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 120
 atccgtgccca gcagtctcca ggttcagaag caattcaaga ccctgatgat agctctccag
 180
 caaccaacac atggtgacat ggtgattgtg ccaacttggt gctcagttat atgcagggcc
 240
 agtgattggt ttaagtgaag accatgggtg agatcatttg tctttggtct aatagaattt
 300
 gagctagtag aatttgagtc tccagggaaa gagctacttg accaaattaa actagtagca
 360
 ggtagagcat gaatgcagc atattatacc atcaagatgt tcttagagca gtgtatggat
 420
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 480
 gtttagaaaag cactttgaaa gttttttgag tacgggggtg ccctgtatca ccccgttatg
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 660
 atacttcac tcattcagat ggttgcaccc tgccaggcat ccagtgggac tgggaatatg
 720
 gacacttgaa cattaacat cctgaagaat tttggaatga caggttacaa gtgaacataa
 780
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 804

<210> 5518

<211> 85

<212> PRT

<213> Homo sapiens

<400> 5518

Xaa	Val	Trp	Pro	Lys	His	Lys	Gly	Lys	Asp	Pro	Gln	Phe	Thr	Phe	Leu
1				5				10						15	
Glu	Leu	Ser	Ser	Val	Leu	Tyr	Cys	Cys	Asp	Leu	Leu	Ile	Gly	Ile	Gly
				20				25					30		
Ile	Val	Val	Gly	Ser	Ser	Asp	Arg	Ile	Arg	Ala	Ser	Ser	Leu	Gln	Val
				35				40					45		
Gln	Lys	Gln	Phe	Lys	Thr	Leu	Met	Ile	Ala	Leu	Gln	Gln	Pro	Thr	His
				50				55					60		
Gly	Asp	Met	Val	Ile	Val	Pro	Thr	Cys	Cys	Ser	Val	Ile	Cys	Arg	Ala
65					70					75					80
Ser	Asp	Trp	Phe	Lys											

85

<210> 5519
 <211> 401
 <212> DNA
 <213> Homo sapiens

<400> 5519
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 120
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 180
 aaaacaaaca cacacagaag ttggcgctgg gcaccacatt ctctcttga cctaaccatc
 240
 aggaatttgc tgtgccatct gttcataaaa cttagccagg cccagaaagc ttgtcccaac
 300
 cacatgctaa gagccaagca gatggaacag aagctcccc aagctgctgg ctcccactat
 360
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<210> 5520
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 5520
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 Trp His Ser Lys Phe Leu Met Val Arg Ser Arg Gly Glu Cys Gly Ala
 20 25 30
 Gln Arg Gln Leu Leu Cys Val Phe Val Phe Arg Asp Ser Leu Arg Glu
 35 40 45
 Gly Asn Ala Arg Arg Asn Met Val Ser Ser Glu Ala His Gly Cys Phe
 50 55 60
 Leu Arg Pro Ala Val Phe Tyr Ala Thr Tyr Pro Cys Thr Ser Tyr Ala
 65 70 75 80
 Lys Glu Thr Lys Pro Ser Ala Cys Leu Phe Pro Leu Leu Ile Ile Gly
 85 90 95
 Lys Trp Met Leu Trp
 100

<210> 5521
 <211> 2524
 <212> DNA
 <213> Homo sapiens

<400> 5521
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acagacgcat cgtttctttt ttaatactcc ctaagaaagg gaataacctt caagctggcg
180
ggagcaatgg ttcacataaa gaaaggcgag ctgacccagg aggagaagga gctactggaa
240
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300
gtcaactggt tggacgagaa tggaatgact cctctaatagc atgcagcata taaaggaaaa
360
ctcgatatgt gcaaattact actgcgacat ggagccgatg taaattgtca tcagcatgaa
420
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540
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1260
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1380
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1440
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1740

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 1860
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 1920
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 1980
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 2340
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<210> 5522

<211> 441

<212> PRT

<213> Homo sapiens

<400> 5522

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			20					25					30		
Ser	Ser	Lys	Asn	Val	Arg	Val	Asn	Cys	Leu	Asp	Glu	Asn	Gly	Met	Thr
		35					40					45			
Pro	Leu	Met	His	Ala	Ala	Tyr	Lys	Gly	Lys	Leu	Asp	Met	Cys	Lys	Leu
		50				55					60				
Leu	Leu	Arg	His	Gly	Ala	Asp	Val	Asn	Cys	His	Gln	His	Glu	His	Gly
65				70				75						80	
Tyr	Thr	Ala	Leu	Met	Phe	Ala	Ala	Leu	Ser	Gly	Asn	Lys	Asp	Ile	Thr
			85					90						95	
Trp	Val	Met	Leu	Glu	Ala	Gly	Ala	Glu	Thr	Asp	Val	Val	Asn	Ser	Val
		100						105					110		
Gly	Arg	Thr	Ala	Ala	Gln	Met	Ala	Ala	Phe	Val	Gly	Gln	His	Asp	Cys
		115				120						125			
Val	Thr	Ile	Ile	Asn	Asn	Phe	Phe	Pro	Arg	Glu	Arg	Leu	Asp	Tyr	Tyr
		130				135					140				
Thr	Lys	Pro	Gln	Gly	Leu	Asp	Lys	Glu	Pro	Lys	Leu	Pro	Pro	Lys	Leu

145						150					155					160
Ala	Gly	Pro	Leu	His	Lys	Ile	Ile	Thr	Thr	Thr	Asn	Leu	His	Pro	Val	
				165						170					175	
Lys	Ile	Val	Met	Leu	Val	Asn	Glu	Asn	Pro	Leu	Leu	Thr	Glu	Glu	Ala	
			180						185					190		
Ala	Leu	Asn	Lys	Cys	Tyr	Arg	Val	Met	Asp	Leu	Ile	Cys	Glu	Lys	Cys	
		195					200					205				
Met	Lys	Gln	Arg	Asp	Met	Asn	Glu	Val	Leu	Ala	Met	Lys	Met	His	Tyr	
		210				215					220					
Ile	Ser	Cys	Ile	Phe	Gln	Lys	Cys	Ile	Asn	Phe	Leu	Lys	Asp	Gly	Glu	
225					230					235					240	
Asn	Lys	Leu	Asp	Thr	Leu	Ile	Lys	Ser	Leu	Leu	Lys	Gly	Arg	Ala	Ser	
				245					250					255		
Asp	Gly	Phe	Pro	Val	Tyr	Gln	Glu	Lys	Ile	Ile	Arg	Glu	Ser	Ile	Arg	
			260						265					270		
Lys	Phe	Pro	Tyr	Cys	Glu	Ala	Thr	Leu	Leu	Gln	Gln	Leu	Val	Arg	Ser	
		275					280					285				
Ile	Ala	Pro	Val	Glu	Ile	Gly	Ser	Asp	Pro	Thr	Ala	Phe	Ser	Val	Leu	
		290				295					300					
Thr	Gln	Ala	Ile	Thr	Gly	Gln	Val	Gly	Phe	Val	Asp	Val	Glu	Phe	Cys	
305					310					315					320	
Thr	Thr	Cys	Gly	Glu	Lys	Gly	Ala	Ser	Lys	Arg	Cys	Ser	Val	Cys	Lys	
				325					330					335		
Met	Val	Ile	Tyr	Cys	Asp	Gln	Thr	Cys	Gln	Lys	Thr	His	Trp	Phe	Thr	
			340					345					350			
His	Lys	Lys	Ile	Cys	Lys	Asn	Leu	Lys	Asp	Ile	Tyr	Glu	Lys	Gln	Gln	
		355					360					365				
Leu	Glu	Ala	Ala	Lys	Glu	Lys	Arg	Gln	Glu	Glu	Asn	His	Gly	Lys	Leu	
						375					380					
Asp	Val	Asn	Ser	Asn	Cys	Val	Asn	Glu	Glu	Gln	Pro	Glu	Ala	Glu	Val	
385					390					395					400	
Gly	Ile	Ser	Gln	Arg	Asp	Ser	Asn	Pro	Glu	Asp	Ser	Gly	Glu	Gly	Lys	
				405					410					415		
Lys	Glu	Ser	Leu	Glu	Ser	Glu	Ala	Glu	Leu	Glu	Gly	Leu	Gln	Asp	Ala	
			420					425					430			
Pro	Ala	Gly	Pro	Gln	Val	Ser	Glu	Glu								
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<212> PRT

<213> Homo sapiens

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Val	His	Ile	Ser	Glu	Gln	Ala	Ala	Leu	Ile	Leu	Asn	Arg	Lys	Lys	Asp						
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Val	Leu	Ala	Ser	Ser	His	Phe	Val	Asp	Leu	Leu	Ala	Pro	Gln	Asp	Met						
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Asn	Trp	Thr	Gln	Arg	Ala	Ala	Arg	Tyr	Glu	Cys	Ala	Pro	Val	Lys	Pro						
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Phe	Phe	Cys	Arg	Ile	Arg	Gly	Gly	Glu	Asp	Arg	Lys	Gln	Glu	Lys	Cys						
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His	Lys	Val	Arg	Thr	Ser	Pro	Leu	Asn	Glu	Asp	Val	Phe	Ala	Thr	Lys						
			370				375						380								
Ile	Lys	Lys	Met	Asn	Asp	Asn	Asp	Lys	Asp	Ile	Thr	Glu	Leu	Gln	Glu						
			385				390						395								
Gln	Ile	Tyr	Lys	Leu	Leu	Gln	Pro	Val	His	Val	Ser	Val	Ser	Ser	Ser						
			405				410						415								
Gly	Tyr	Gly	Ser	Leu	Gly	Ser	Ser	Gly	Ser	Gln	Glu	Gln	Leu	Val	Ser						
			420				425						430								
Ile	Ala	Ser	Ser	Ser	Glu	Ala	Ser	Gly	His	Arg	Val	Glu	Glu	Thr	Lys						
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Glu Ile Thr Gln Leu Glu Ser Trp Glu Glu Pro Phe Met Pro Ala Trp
      50              55              60
Glu Val Val Thr Ser Ala Ile Pro Arg Glu Thr Leu Arg Met Ala Phe
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 Tyr Leu Ala Thr Val Gln Ala Ile Ala Leu Gly Thr Arg Phe Ile Ile
 50 55 60
 Glu Ala Met Glu Ala Ala Gly His Ser Ile Ser Thr Leu Phe Leu Cys
 65 70 75 80
 Gly Gly Leu Ser Lys Asn Pro Leu Phe Val Gln Met His Ala Asp Ile
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 Thr Gly Met Pro Val Val Leu Ser Gln Glu Val Glu Ser Val Leu Val
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<212> PRT

<213> Homo sapiens

<400> 5530

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 35 40 45
 Glu Asn Gly Gln Arg Lys Tyr Gly Gly Pro Pro Pro Gly Trp Glu Gly
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 Pro His Pro Gln Arg Gly Cys Glu Val Phe Val Gly Lys Ile Pro Arg
 65 70 75 80
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 Ile Tyr Glu Leu Arg Leu Met Met Asp Phe Asp Gly Lys Asn Arg Gly
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 Met Lys Lys Arg Glu Glu Ile Leu Glu Glu Ile Ala Lys Val Thr Glu
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 Asn Arg Gly Phe Ala Phe Val Glu Tyr Glu Ser His Arg Ala Ala Ala
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 305 310 315 320
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 325 330 335
 Ala Glu Ala Ala Gln Gln Pro Ser Tyr Val Tyr Ser Cys Asp Pro Tyr

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 405 410 415
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<212> DNA

<213> Homo sapiens

<400> 5533

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 Glu Asp Ile Glu Pro Asp Arg Asn Leu Pro Val Gly Leu Arg Gln Lys
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 Glu Leu Ile Phe Thr Glu Ser Asn Ser Glu Val Ser Glu Glu Val Tyr
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<210> 5536

<211> 306

<212> PRT

<213> Homo sapiens

<400> 5536

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Glu Leu Leu Ala Gly Gln Lys Lys Ser Ser Pro Phe Trp Thr Phe Glu
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Tyr Tyr Gln Thr Phe Phe Asp Val Asp Thr Tyr Gln Val Phe Asp Arg
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Ile Lys Gly Ser Leu Leu Pro Ile Pro Gly Lys Asn Phe Val Arg Leu
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Tyr Ile Arg Ser Asn Pro Asp Leu Tyr Gly Pro Phe Trp Ile Cys Ala
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Thr Leu Val Phe Ala Ile Ala Ile Ser Gly Asn Leu Ser Asn Phe Leu
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Ile His Leu Gly Glu Lys Thr Tyr His Tyr Val Pro Glu Phe Arg Lys
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Val Ser Ile Ala Ala Thr Ile Ile Tyr Ala Tyr Ala Trp Leu Val Pro
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Leu Ala Leu Trp Gly Phe Leu Met Trp Arg Asn Ser Lys Val Met Asn
          180          185          190
Ile Val Ser Tyr Ser Phe Leu Glu Ile Val Cys Val Tyr Gly Tyr Ser
          195          200          205
Leu Phe Ile Tyr Ile Pro Thr Ala Ile Leu Trp Ile Ile Pro Gln Lys
          210          215          220
Ala Val Arg Trp Ile Leu Val Met Ile Ala Leu Gly Ile Ser Gly Ser
225          230          235          240
Leu Leu Ala Met Thr Phe Trp Pro Ala Val Arg Glu Asp Asn Arg Arg
          245          250          255
Val Ala Leu Ala Thr Ile Val Thr Ile Val Leu Leu His Met Leu Leu
          260          265          270
Ser Val Gly Cys Leu Ala Tyr Phe Phe Asp Ala Pro Glu Met Asp His
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<210> 5537

<211> 2881

<212> DNA

<213> Homo sapiens

<400> 5537

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<210> 5538

<211> 352

<212> PRT

<213> Homo sapiens

<400> 5538

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			20					25				30			
Ala	Glu	Leu	Arg	His	Leu	Asp	Thr	Gln	Val	Gln	Arg	Cys	Glu	Asp	Ile
		35					40					45			
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Ile Met Cys Met Asp His Leu Glu Glu Met Leu Lys Leu Val Asn Gly
      85              90              95
Asn Pro Val Val Met Lys Asp Gly Lys Trp Val Val Gln Lys Tyr Ile
      100             105             110
Glu Arg Pro Leu Leu Ile Phe Gly Thr Lys Phe Asp Leu Arg Gln Trp
      115             120             125
Phe Leu Val Thr Asp Trp Asn Pro Leu Thr Val Trp Phe Tyr Arg Asp
      130             135             140
Ser Tyr Ile Arg Phe Ser Thr Gln Pro Phe Ser Leu Lys Asn Leu Asp
145             150             155             160
Asn Ser Val His Leu Cys Asn Asn Ser Ile Gln Lys His Leu Glu Asn
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Ser Cys His Arg His Pro Leu Leu Pro Pro Asp Asn Met Trp Ser Ser
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Gln Arg Phe Gln Ala His Leu Gln Glu Met Gly Ala Pro Asn Ala Trp
      195             200             205
Ser Thr Ile Ile Val Pro Gly Met Lys Asp Ala Val Ile His Ala Leu
      210             215             220
Gln Thr Ser Gln Asp Thr Val Gln Cys Arg Lys Ala Ser Phe Glu Leu
225             230             235             240
Tyr Gly Ala Asp Phe Val Phe Gly Glu Asp Phe Gln Pro Trp Leu Ile
      245             250             255
Glu Ile Asn Ala Ser Pro Thr Met Ala Pro Ser Thr Ala Val Thr Ala
      260             265             270
Arg Leu Cys Ala Gly Val Gln Ala Asp Thr Leu Arg Val Val Ile Asp
      275             280             285
Arg Arg Leu Asp Arg Asn Cys Asp Thr Gly Ala Phe Glu Leu Ile Tyr
      290             295             300
Lys Gln Pro Val Thr Thr Ser Pro Ala Ser Thr Pro Arg Pro Ser Cys
305             310             315             320
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<210> 5539

<211> 1887

<212> DNA

<213> Homo sapiens

<400> 5539

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<210> 5540
 <211> 378
 <212> PRT
 <213> Homo sapiens

<400> 5540

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      35           40           45
Ala Pro Trp Cys Ser Val Ser Ser Gly Pro Ser Arg Tyr Val Leu Gly
 50           55           60
Met Gln Glu Leu Phe Arg Gly His Ser Lys Thr Arg Glu Phe Leu Ala
 65           70           75           80
His Ser Ala Lys Val His Ser Val Ala Trp Ser Cys Asp Gly Arg Arg
      85           90           95
Leu Ala Ser Gly Ser Phe Asp Lys Thr Ala Ser Val Phe Leu Leu Glu
      100          105          110
Arg Thr Gly Trp Ser Lys Lys Thr Ile Ile Gly Asp Met Gly Ile Xaa
      115          120          125
Val Asp Gln Leu Cys Trp His Pro Ser Asn Pro Asp Leu Phe Val Thr
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Ala Ser Gly Asp Lys Thr Ile Arg Ile Trp Asp Val Arg Thr Thr Lys
      145          150          155          160
Cys Ile Ala Thr Val Asn Thr Lys Gly Glu Asn Ile Asn Ile Cys Trp
      165          170          175
Ser Pro Asp Gly Gln Thr Ile Ala Val Gly Asn Lys Asp Asp Val Val
      180          185          190
Thr Phe Ile Asp Ala Lys Thr His Arg Ser Lys Ala Glu Glu Gln Phe
      195          200          205
Lys Phe Glu Val Asn Glu Ile Ser Trp Asn Asn Asp Asn Asn Met Phe
      210          215          220
Phe Leu Thr Asn Gly Asn Gly Cys Ile Asn Ile Leu Ser Tyr Pro Glu
      225          230          235          240
Leu Lys Pro Val Gln Ser Ile Asn Ala His Pro Ser Asn Cys Ile Cys
      245          250          255
Ile Lys Phe Asp Pro Met Gly Lys Tyr Phe Ala Thr Gly Ser Ala Asp
      260          265          270
Ala Leu Val Ser Leu Trp Asp Val Asp Glu Leu Val Cys Val Arg Cys
      275          280          285
Phe Ser Arg Leu Asp Trp Pro Val Arg Thr Leu Ser Phe Ser His Asp
      290          295          300
Gly Lys Met Leu Ala Ser Ala Ser Glu Asp His Phe Ile Asp Ile Ala
      305          310          315          320
Glu Val Glu Thr Gly Asp Lys Leu Trp Glu Val Gln Cys Glu Ser Pro
      325          330          335
Thr Phe Thr Val Ala Trp His Pro Lys Arg Pro Leu Leu Ala Phe Ala
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<210> 5541

<211> 1854

<212> DNA

<213> Homo sapiens

<400> 5541

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<210> 5542

<211> 315

<212> PRT

<213> Homo sapiens

<400> 5542

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Leu	Leu	Arg	Ala	Val	Arg	Ala	Ser	Ser	Val	Phe	Pro	Ile	Leu	Ser	Val
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Pro	Pro	Tyr	Arg	Tyr	Arg	Phe	Arg	Arg	Arg	Ser	Ser	Ser	Arg	Ser	Thr
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<210> 5544

<211> 1141

<212> PRT

<213> Homo sapiens

<400> 5544

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 Met Gly Gly Gly Gly Gly Gly Ser Pro Ser Pro Val Glu Leu Arg Gly
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 Ala Leu Val Gly Ser Val Asp Pro Thr Leu Arg Glu Gln Gln Leu Gln
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 Lys Glu Ser Ala Ile Ala Ser Thr Glu Val Lys Leu Arg Leu Gln Glu
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 225 230 235 240
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 Thr Gly Lys Phe Met Ser Thr Ser Ser Ile Pro Gly Cys Leu Leu Gly
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Ser Arg Thr Gln Ser Ser Pro Leu Pro Gln Ser Pro Gln Ala Leu Gln					
	515		520		525
Gln Leu Val Met Gln Gln Gln His Gln Gln Phe Leu Glu Lys Gln Lys					
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Gln Gln Gln Leu Gln Leu Gly Lys Ile Leu Thr Lys Thr Gly Glu Leu					
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Pro Leu Gln Val Tyr Gln Ala Pro Leu Ser Leu Ala Thr Val Pro His					
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Lys Ser Pro Pro Asp Gln Pro Val Lys His Leu Phe Thr Thr Gly Val					
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Asn Ser Val Ala Ile Thr Ala Lys Leu Leu Gln Gln Lys Leu Asn Val					
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<211> 1932

<212> DNA

<213> Homo sapiens

<400> 5545

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<211> 183
 <212> PRT
 <213> Homo sapiens

<400> 5546
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 <212> DNA
 <213> Homo sapiens

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<211> 167

<212> PRT

<213> Homo sapiens

<400> 5548

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<210> 5549

<211> 1865

<212> DNA

<213> Homo sapiens

<400> 5549

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<210> 5550

<211> 242

<212> PRT

<213> Homo sapiens

<400> 5550

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		115					120					125			
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Phe	His	Gln	Ala	Leu	Lys	Asn	Cys	Glu	Pro	Met	Ile	Gly	Leu	Val	Pro
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Ile	Leu	Lys	Gly	Gly	Arg	Phe	Tyr	Gln	Val	Pro	Val	Pro	Leu	Pro	Asp
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<210> 5551

<211> 1689

<212> DNA

<213> Homo sapiens

<400> 5551

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<210> 5552

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5552

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			20					25					30		
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		35					40					45			
Phe	Ser	Val	Ile	Val	Arg	Val	Val	Gly	Asp	Leu	Met	Leu	Arg	Ile	Gln
		50				55					60				
Arg	Ile	Gln	Asp	Phe	Thr	Pro	Lys	Leu	Leu	Val	Arg	Lys	Arg	Leu	
65					70				75					80	
Leu	Gly	Leu	Glu	Pro	Glu	Gly	Pro	Ile	Ser	Asp	Leu	Glu	Pro	Val	Glu
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<210> 5553

<211> 274

<212> DNA

<213> Homo sapiens

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<212> PRT
<213> Homo sapiens

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35 40 45
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<211> 414
<212> DNA
<213> Homo sapiens

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<210> 5556
<211> 115
<212> PRT
<213> Homo sapiens

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<213> Homo sapiens
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<211> 360

<212> PRT

<213> Homo sapiens

<400> 5558

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			20					25					30		
Ser	Val	Pro	Arg	Glu	Pro	Ile	Asp	Arg	Lys	Arg	Leu	Lys	Lys	Asp	Val
		35					40					45			
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	50					55					60				
Gln	Ser	Pro	Pro	Ser	Ser	Ser	Leu	Thr	Ala	Thr	Arg	Gln	Lys	Pro	Ser
65				70						75				80	
Gln	Ser	Pro	Ser	Ala	Pro	Pro	Ala	Asp	Val	Thr	Pro	Lys	Pro	Ala	Thr
			85					90						95	
Glu	Ala	Val	Gln	Ser	Glu	His	Ser	Asp	Ala	Ser	Pro	Met	Ser	Ile	Asn
		100					105						110		
Glu	Val	Ile	Leu	Ser	Ala	Ser	Gly	Ala	Cys	Lys	Leu	Ile	Asp	Ser	Leu
	115						120					125			
His	Ser	Tyr	Cys	Phe	Ser	Ser	Arg	Gln	Asn	Lys	Ser	Gln	Val	Cys	Cys

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	165	170
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Ser Pro Ser Arg Glu Pro Pro Lys Met Asn Pro Val Val Glu Pro Leu		190
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Ser Trp Met Leu Gly Thr Trp Leu Ser Asp Pro Pro Gly Ala Gly Thr		205
	210	215
Tyr Pro Thr Leu Gln Pro Phe Gln Tyr Leu Glu Glu Val His Ile Ser		220
225	230	235
His Val Gly Gln Pro Met Leu Asn Phe Ser Phe Asn Ser Phe His Pro		240
	245	250
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	260	265
Pro Asp Thr Asn Lys Val Ala Phe Val Ser Ala Gln Asn Thr Gly Val		270
	275	280
Val Glu Val Glu Glu Gly Glu Val Asn Gly Gln Glu Leu Cys Ile Ala		285
	290	295
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Gln Ile Thr Arg Lys Phe Arg Leu Asn Ser Glu Gly Lys Leu Glu Gln		320
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<211> 3866

<212> DNA

<213> Homo sapiens

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<210> 5560
 <211> 1165
 <212> PRT
 <213> Homo sapiens

<400> 5560
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 Gln Leu Ala Ala Ile Lys Val Met Asp Val Thr Glu Asp Glu Glu Glu
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 Glu Ile Lys Leu Glu Ile Asn Met Leu Lys Lys Tyr Ser His His Arg
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 Asn Ile Ala Thr Tyr Tyr Gly Ala Phe Ile Lys Lys Ser Pro Pro Gly
 85 90 95
 His Asp Asp Gln Leu Trp Leu Val Met Glu Phe Cys Gly Ala Gly Ser
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 Ile Thr Asp Leu Val Lys Asn Thr Lys Gly Asn Thr Leu Lys Glu Asp
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 Trp Ile Ala Tyr Ile Ser Arg Glu Ile Leu Arg Gly Leu Ala His Leu
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 His Ile His His Val Ile His Arg Asp Ile Lys Gly Gln Asn Val Leu
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 Leu Thr Glu Asn Ala Glu Val Lys Leu Val Asp Phe Gly Val Ser Ala
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 Gln Leu Asp Arg Thr Val Gly Arg Arg Asn Thr Phe Ile Gly Thr Pro
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 Thr Tyr Asp Tyr Arg Ser Asp Leu Trp Ser Cys Gly Ile Thr Ala Ile
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 Glu Met Ala Glu Gly Ala Pro Pro Leu Cys Asp Met His Pro Met Arg
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 Ala Leu Phe Leu Ile Pro Arg Asn Pro Pro Arg Leu Lys Ser Lys
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 Lys Trp Ser Lys Lys Phe Ile Asp Phe Ile Asp Thr Cys Leu Ile Lys
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 His Ile Asp Arg Thr Arg Lys Lys Arg Gly Glu Lys Glu Glu Thr Glu
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 Tyr Glu Tyr Ser Gly Ser Glu Glu Glu Asp Asp Ser His Gly Glu Glu
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 Gly Glu Pro Ser Ser Ile Met Asn Val Pro Gly Glu Ser Thr Leu Arg

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Glu	Ala	Arg	Arg	Gln	Gln	Glu	Arg	Glu	Gln	Arg	Arg	Arg	Glu	Gln	Glu		
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Glu	Lys	Arg	Arg	Leu	Glu	Glu	Leu	Glu	Arg	Arg	Arg	Lys	Glu	Glu	Glu		
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Glu	Tyr	Ile	Arg	Arg	Gln	Leu	Glu	Glu	Glu	Gln	Arg	His	Leu	Glu	Val		
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Cys Asp Gly Met Arg Pro Glu Ala Ile Arg Gln Asp Pro Thr Arg Lys
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Gly Ser Val Val Asn Val Asn Pro Thr Asn Thr Arg Pro Gln Ser Asp
      820              825              830
Thr Pro Glu Ile Arg Lys Tyr Lys Lys Arg Phe Asn Ser Glu Ile Leu
      835              840              845
Cys Ala Ala Leu Trp Gly Val Asn Leu Leu Val Gly Thr Glu Ser Gly
      850              855              860
Leu Met Leu Leu Asp Arg Ser Gly Gln Gly Lys Val Tyr Pro Leu Ile
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Asn Arg Arg Arg Phe Gln Gln Met Asp Val Leu Glu Gly Leu Asn Val
      885              890              895
Leu Val Thr Ile Ser Gly Lys Lys Asp Lys Leu Arg Val Tyr Tyr Leu
      900              905              910
Ser Trp Leu Arg Asn Lys Ile Leu His Asn Asp Pro Glu Val Glu Lys
      915              920              925
Lys Gln Gly Trp Thr Thr Val Gly Asp Leu Glu Gly Cys Val His Tyr
      930              935              940
Lys Val Val Lys Tyr Glu Arg Ile Lys Phe Leu Val Ile Ala Leu Lys
945              950              955              960
Ser Ser Val Glu Val Tyr Ala Trp Ala Pro Lys Pro Tyr His Lys Phe
      965              970              975
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      980              985              990
Asp Leu Thr Val Glu Glu Gly Gln Arg Leu Lys Val Ile Tyr Gly Ser
      995              1000              1005
Cys Ala Gly Phe His Ala Val Asp Val Asp Ser Gly Ser Val Tyr Asp
      1010              1015              1020
Ile Tyr Leu Pro Thr His Val Arg Lys Asn Pro His Ser Met Ile Gln
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Met Glu Leu Leu Val Cys Tyr Glu Asp Glu Gly Val Tyr Val Asn Thr
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Tyr Gly Arg Ile Thr Lys Asp Val Val Leu Gln Trp Gly Glu Met Pro
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Thr Ser Val Ala Tyr Ile Arg Ser Asn Gln Thr Met Gly Trp Gly Glu
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Lys Ala Ile Glu Ile Arg Ser Val Glu Thr Gly His Leu Asp Gly Val
1105              1110              1115              1120
Phe Met His Lys Arg Ala Gln Arg Leu Lys Phe Leu Cys Glu Arg Asn
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<210> 5561

<211> 2089

<212> DNA

<213> Homo sapiens

<400> 5561

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<211> 372

<212> PRT

<213> Homo sapiens

<400> 5562

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Ile	Cys	Val	Asp	Cys	Ala	Met	Glu	Ser	Ser	Arg	Asn	Ser	Ser	Met	Leu
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Thr	Leu	Pro	Leu	Ser	Leu	Phe	Asp	Val	Asp	Ser	Lys	Pro	Leu	Lys	Thr
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<211> 683

<212> PRT

<213> Homo sapiens

<400> 5564

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 Leu Ser Asn Arg Arg Leu Lys His Phe Pro Arg Gly Ala Ala Arg Ser
 50 55 60
 Tyr Asp Leu Ser Asp Ile Thr Gln Ala Asp Leu Ser Arg Asn Arg Phe
 65 70 75 80
 Pro Glu Val Pro Glu Ala Ala Cys Gln Leu Val Ser Leu Glu Gly Leu
 85 90 95
 Ser Leu Tyr His Asn Cys Leu Arg Cys Leu Asn Pro Ala Leu Gly Asn
 100 105 110
 Leu Thr Ala Leu Thr Tyr Leu Asn Leu Ser Arg Asn Gln Leu Ser Leu
 115 120 125
 Leu Pro Pro Tyr Ile Cys Gln Leu Pro Leu Arg Val Leu Ile Val Ser
 130 135 140
 Asn Asn Lys Leu Gly Ala Leu Pro Pro Asp Ile Gly Thr Leu Gly Ser
 145 150 155 160
 Leu Arg Gln Leu Asp Val Ser Ser Asn Glu Leu Gln Ser Leu Pro Ser
 165 170 175
 Glu Leu Cys Gly Leu Ser Ser Leu Arg Asp Leu Asn Val Arg Arg Asn
 180 185 190
 Gln Leu Ser Thr Leu Pro Glu Glu Leu Gly Asp Leu Pro Leu Val Arg
 195 200 205
 Leu Asp Phe Ser Cys Asn Arg Val Ser Arg Ile Pro Val Ser Phe Cys
 210 215 220
 Arg Leu Arg His Leu Gln Val Ile Leu Leu Asp Ser Asn Pro Leu Gln
 225 230 235 240
 Ser Pro Pro Ala Gln Val Cys Leu Lys Gly Lys Leu His Ile Phe Lys
 245 250 255
 Tyr Leu Ser Thr Glu Ala Gly Gln Arg Gly Ser Ala Leu Gly Asp Leu

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Ala	Pro	Ser	Arg	Pro	Pro
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Phe	Pro	Gly	His	Arg	Tyr
	290		295		300
Val	Asp	Ser	Gly	Ser	Lys
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Phe	Ser	Glu	Leu	Ser	Phe
			325		330
Gly	Pro	Arg	Glu	Arg	Lys
			340		345
Gln	Ile	Asp	Phe	Ile	Asp
			355		360
Gly	Thr	Val	Glu	Glu	Gln
			370		375
Asp	Arg	Glu	Arg	Ala	Pro
			385		390
Glu	Arg	Arg	Arg	Pro	Asp
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Arg	Gln	Gln	Gln	Gln	Ser
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Leu	Leu	Lys	Pro	Gly	Leu
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Ser	Thr	Gln	Ala	Met	His
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Ala	Gly	Gly	Cys	Ser	Gly
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Gln	Glu	Pro	Leu	Pro	Ile
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Pro	Leu	Gly	Ser	Ile	Gln
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Ser	Gln	Ser	Gly	Ser	Gly
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Arg	Arg	Tyr	Pro	Gln	Val
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Arg	Gln	Val	Leu	Glu	Ser
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Ala	Glu	Ala	Leu	Ala	Ser
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Leu	Arg	Pro	Arg	Ser	Val
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Pro	Lys	Leu	Ser	Ala	Leu
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Glu	Ala	Cys	Arg	Lys	Met
					610
Ser	Asp	Leu	Leu	Gln	Gly
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Ala	Val	Lys	Arg	Val	Gly
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<210> 5565
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 <212> DNA
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<210> 5566
 <211> 76
 <212> PRT
 <213> Homo sapiens

<400> 5566
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 Leu Asp Leu Gln Gly Ser Ser Asp Pro Pro Ala Ser Ala Ser Arg Ala
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 <212> DNA
 <213> Homo sapiens

<400> 5567
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 aatttcatat gctttttctca tgccacaaaa tattattctt ttgattgtat tcaacctttt
 120
 taaaaacat ttttagctca caagctgtac aaaaacagac ggtgagtaaa ttggcccaca
 180
 gaccggtttg ctagcccctg ggcttaagag atctgtccac ttactcctca acatgcagag
 240


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<210> 5568
<211> 130
<212> PRT
<213> Homo sapiens
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<210> 5569
<211> 876

<212> DNA

<213> Homo sapiens

<400> 5569

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nntttttttt tttttttttt ttgttaacct agagaaaaaa attttattta aagacacatt
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ttaagtaaaa tgaagaacat tttacttatt tttatgtcca gtacagtcaa agcagccaca
120
ttgcataacc ccgggggacc cccttcctct ttgtgatgcc ccagaacaat attgatttga
180
ttatagaaag ccaccggcag cctacatgcg caacgggtgag ttgttggtta tatacactgt
240
ggaccataca gtggaatatt acagtcaata aaagggtattt ttagagagaa aaaaaaacat
300
tggaacacgc ttatgatata atgttaggca aaatcgctgt tatgaacagc tcgtttgggg
360
cagagcaaat cctgggaagt aacgctgagg ctgttggtgc aggcgggtgga gtacaacatc
420
ttcgagggta tggagtgcc cggctcccca ctagtggtca tcagccaggg caagatcgtc
480
tttgaagacg gaaacatcaa cgtcaacaag ggcattgggc gcttcattcc gcggaaggcg
540
ttcccgagc acagttccac gtggctggaa cttcacaatc atggcagaag gcacgtctgc
600
gaggcatcct ggggctgcac tgetgatect cttctctctc ccctggccct gagtgtctgc
660
ttcatgtggc tcagcccttc cgtccttcaa gccttcatca gcttcagggc agccccgagt
720
ctgtgcccag gtacactggc taaaatgcag tgtcttccaa atagccatat ctcttttaat
780
cagggagcaa ttccagcatg gaagtcccca tcatgtcctt gctggcaggt acaggtgcc
840
gtttgtgacg gatgaaagca ccgacagccc acgcgt
876

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<210> 5570

<211> 169

<212> PRT

<213> Homo sapiens

<400> 5570

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Thr Ala Arg Leu Gly Gln Ser Lys Ser Trp Glu Val Thr Leu Arg Leu
1           5           10           15
Leu Val Gln Ala Val Glu Tyr Asn Ile Phe Glu Gly Met Glu Cys His
20           25           30
Gly Ser Pro Leu Val Val Ile Ser Gln Gly Lys Ile Val Phe Glu Asp
35           40           45
Gly Asn Ile Asn Val Asn Lys Gly Met Gly Arg Phe Ile Pro Arg Lys
50           55           60
Ala Phe Pro Glu His Ser Ser Thr Trp Leu Glu Leu His Asn His Gly
65           70           75           80
Arg Arg His Val Cys Glu Ala Ser Trp Gly Cys Thr Ala Asp Pro Leu
85           90           95
Leu Ser Pro Leu Ala Leu Ser Ala Ala Phe Met Trp Leu Ser Pro Ser

```

```

      100              105              110
Val Leu Gln Ala Phe Ile Ser Phe Arg Ala Ala Pro Ser Leu Cys Pro
      115              120              125
Gly Thr Leu Ala Lys Met Gln Cys Leu Pro Asn Ser His Ile Ser Phe
      130              135              140
Asn Gln Gly Ala Ile Pro Ala Trp Lys Ser Pro Ser Cys Ser Cys Trp
      145              150              155              160
Gln Val Gln Val Pro Val Cys Asp Gly
      165

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<210> 5571
 <211> 405
 <212> DNA
 <213> Homo sapiens

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<400> 5571
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atggtcacgg cttcagaaag gatctttgtt ctcaaccaac tcagagatcc cacttcgcct
120
aagtttccag aagactttga cgatggagag catgcaaagc agaaatcagt catctcctgg
180
ctgttgaacc acgatccagc aaaacggccc acagccacag aactgctcaa gagtgaagctg
240
ctgccccac cccagatgga ggagtcagag ctgcatgaag tgctgcacca cacgctgacc
300
aacgtggatg ggaaggccta ccgcaccatg atggcccaga tcttctcgca gcgcctcgct
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ggggcggggg gaggtggcta ccgctcccgg cttggcgctc cgcg
405

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<210> 5572
 <211> 135
 <212> PRT
 <213> Homo sapiens

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<400> 5572
Asn Gln Lys Val Asp Leu Phe Ser Leu Gly Ile Ile Phe Phe Glu Met
1      5      10      15
Ser Tyr His Pro Met Val Thr Ala Ser Glu Arg Ile Phe Val Leu Asn
      20      25      30
Gln Leu Arg Asp Pro Thr Ser Pro Lys Phe Pro Glu Asp Phe Asp Asp
      35      40      45
Gly Glu His Ala Lys Gln Lys Ser Val Ile Ser Trp Leu Leu Asn His
      50      55      60
Asp Pro Ala Lys Arg Pro Thr Ala Thr Glu Leu Leu Lys Ser Glu Leu
65      70      75      80
Leu Pro Pro Pro Gln Met Glu Glu Ser Glu Leu His Glu Val Leu His
      85      90      95
His Thr Leu Thr Asn Val Asp Gly Lys Ala Tyr Arg Thr Met Met Ala
      100     105     110
Gln Ile Phe Ser Gln Arg Leu Ala Gly Ala Gly Gly Gly Tyr Arg
      115     120     125
Ser Arg Leu Gly Val Pro Arg

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130

135

<210> 5573
<211> 1279
<212> DNA
<213> Homo sapiens

<400> 5573
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60
cctccagaca gtaccacagg cacctggagt accggcatcg gtcgctgtgg cccccgagtg
120
tccgtcagag cctaggggag cctgccctcc cgcgcctcgt cggggcccg ccaggcacct
180
tggccgccgg cgcacggacg cgggcacgag cactagatca cggctgctgg acctcggcac
240
gttgacaaga tttctctggg gtaccgcgga ggattacttt gaatttcggt ggtcgcctgt
300
ggtctggcat atttagaact taagtctatt atttcgggca ccatgacttt gaggctttta
360
gaagactggt gcagggggat ggacatgaac cctcggaaag cgctattgat tgccggcatc
420
tcccagagct gcagtgtggc agaaatcgag gaggctctgc aggctggttt agctcccttg
480
ggggagtaca gactgcttgg aaggatgttc aggagggatg agaacaggaa agtagcctta
540
gtagggttta ctgcggagac tagtcacgcc ctggtcccta aggagatacc gggaaaaggg
600
ggtatctgga gagtgatctt taagccccct gaccagata atacattttt aagcagatta
660
aatgaatttt tagcgggaga gggcatgaca gtgggtgagt tgagcagagc tcttggacat
720
gaaaatggct ccttagaccc agagcagggc atgatcccg aaatgtgggc ccctatgttg
780
gcacaggcat tagaggctct tcagcctgcc ctgcaatgct tgaagtataa aaagctgaga
840
gtgttctcgg gcagggagtc tccagaacca ggagaagaag aatttggacg ctggatgttt
900
catactactc agatgataaa ggcgtggcag gtgccagatg tagagaagag aaggcgattg
960
ctagagagcc ttcgaggccc agcacttgat gttattcgtg tcctcaagat aaacaatcct
1020
ttaattactg tcgatgaatg tctgcaggct cttgaggagg tatttggggg tacagataat
1080
cctagggagt tgcagggtcaa atatctaacc acttaccaga aggatgagga aaagtgtgctg
1140
gcttatgtac taaggctgga gcctttgtta cagaagctgg tacagagagg agcaattgag
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agagatgctg tgaatcaggc ccgcctagac caagtcattg ctggggcagt ccacaaaaca
1260
attcgagag agcttaata
1279

<210> 5574

<211> 312
 <212> PRT
 <213> Homo sapiens

<400> 5574

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Met Thr Leu Arg Leu Leu Glu Asp Trp Cys Arg Gly Met Asp Met Asn
 1              5              10              15
Pro Arg Lys Ala Leu Leu Ile Ala Gly Ile Ser Gln Ser Cys Ser Val
      20              25              30
Ala Glu Ile Glu Glu Ala Leu Gln Ala Gly Leu Ala Pro Leu Gly Glu
      35              40              45
Tyr Arg Leu Leu Gly Arg Met Phe Arg Arg Asp Glu Asn Arg Lys Val
      50              55              60
Ala Leu Val Gly Leu Thr Ala Glu Thr Ser His Ala Leu Val Pro Lys
      65              70              75              80
Glu Ile Pro Gly Lys Gly Gly Ile Trp Arg Val Ile Phe Lys Pro Pro
      85              90              95
Asp Pro Asp Asn Thr Phe Leu Ser Arg Leu Asn Glu Phe Leu Ala Gly
      100             105             110
Glu Gly Met Thr Val Gly Glu Leu Ser Arg Ala Leu Gly His Glu Asn
      115             120             125
Gly Ser Leu Asp Pro Glu Gln Gly Met Ile Pro Glu Met Trp Ala Pro
      130             135             140
Met Leu Ala Gln Ala Leu Glu Ala Leu Gln Pro Ala Leu Gln Cys Leu
      145             150             155             160
Lys Tyr Lys Lys Leu Arg Val Phe Ser Gly Arg Glu Ser Pro Glu Pro
      165             170             175
Gly Glu Glu Glu Phe Gly Arg Trp Met Phe His Thr Thr Gln Met Ile
      180             185             190
Lys Ala Trp Gln Val Pro Asp Val Glu Lys Arg Arg Arg Leu Leu Glu
      195             200             205
Ser Leu Arg Gly Pro Ala Leu Asp Val Ile Arg Val Leu Lys Ile Asn
      210             215             220
Asn Pro Leu Ile Thr Val Asp Glu Cys Leu Gln Ala Leu Glu Glu Val
      225             230             235             240
Phe Gly Val Thr Asp Asn Pro Arg Glu Leu Gln Val Lys Tyr Leu Thr
      245             250             255
Thr Tyr Gln Lys Asp Glu Glu Lys Leu Ser Ala Tyr Val Leu Arg Leu
      260             265             270
Glu Pro Leu Leu Gln Lys Leu Val Gln Arg Gly Ala Ile Glu Arg Asp
      275             280             285
Ala Val Asn Gln Ala Arg Leu Asp Gln Val Ile Ala Gly Ala Val His
      290             295             300
Lys Thr Ile Arg Arg Glu Leu Asn
      305             310

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<210> 5575
 <211> 2405
 <212> DNA
 <213> Homo sapiens

<400> 5575

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60

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120
ttagcatata cagtagagtt tctaattgtt tcagcattcc ctagtgggcg gttacaagtt
180
aggttgggat tctaatacata ttttatgata tctcacagat taaattgcac tttgtctctg
240
cccagtcttg attccctttt ggccagcagt ttttaggtct gtcagtactg cactgcaaga
300
atggcagatt ttgggatctc tgctggccag tttgtggcag tggctctggga taagtcatcc
360
ccagtggagg ctctgaaagg tctggtggat aagcttcaag cgtaaacgg caatgagggc
420
cgctgtcttg tggaaaacat caagcagctg ttgcaatgtt tagtcccagg aagcaccact
480
ctgcacagtg ctgagatttt ggctgaaatc gcccggtacc ttcggcctgg tggatgtctt
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tttctgaagg agccagtaga gacagctgta gataacaata gcaaagtga gacagcatct
600
aagctgtgtt cagccctgac tctttctggt cttgtggaag tgaaagagct gcagcgggag
660
cccctaacc ctgaggaagt acagtctgtt cgagaacacc ttggtcatga aagtgacaac
720
ctgctgtttg ttcagatcac aggcaaaaaa ccaaactttg aagtgggttc ttctaggcag
780
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840
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900
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1020
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1080
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1140
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1200
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1260
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1320
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1380
gatagcaatc ttcagatgc ctaggaggtt cctgacatgg gacctctg ctcctccagc
1440
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1560
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1680

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 1800
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 1860
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 1920
 ctgccccctt ccatcccca ccacatttga ctgtagcatt gcatctgtgt cctgttgtca
 1980
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 2040
 atgtcttgta aagagagggg atgtgcattt gtgtgtgatg ttggatagtc atccacgctc
 2100
 agtttgacc attggaggaa cttagtgtca cgcacaaatg gggctattcc tacgcttaga
 2160
 atagggcttg tctgccact ttagaagagt ccaggttggt gagcatttag agggaagcag
 2220
 ggcagaactc tgaacgacaa tacgtctctc tgagcagaga cccctttgtt cttgttatcc
 2280
 acccatatgg acttggaatc aatcttgcca aatatttga gagattgtgt ggatttaaga
 2340
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 2400
 cttga
 2405

<210> 5576

<211> 367

<212> PRT

<213> Homo sapiens

<400> 5576

Met	Ala	Asp	Phe	Gly	Ile	Ser	Ala	Gly	Gln	Phe	Val	Ala	Val	Val	Trp
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Asp	Lys	Ser	Ser	Pro	Val	Glu	Ala	Leu	Lys	Gly	Leu	Val	Asp	Lys	Leu
			20					25					30		
Gln	Ala	Leu	Thr	Gly	Asn	Glu	Gly	Arg	Val	Ser	Val	Glu	Asn	Ile	Lys
		35				40						45			
Gln	Leu	Leu	Gln	Cys	Leu	Val	Pro	Gly	Ser	Thr	Thr	Leu	His	Ser	Ala
	50					55					60				
Glu	Ile	Leu	Ala	Glu	Ile	Ala	Arg	Ile	Leu	Arg	Pro	Gly	Gly	Cys	Leu
65					70				75					80	
Phe	Leu	Lys	Glu	Pro	Val	Glu	Thr	Ala	Val	Asp	Asn	Asn	Ser	Lys	Val
			85					90						95	
Lys	Thr	Ala	Ser	Lys	Leu	Cys	Ser	Ala	Leu	Thr	Leu	Ser	Gly	Leu	Val
		100						105					110		
Glu	Val	Lys	Glu	Leu	Gln	Arg	Glu	Pro	Leu	Thr	Pro	Glu	Glu	Val	Gln
		115				120						125			
Ser	Val	Arg	Glu	His	Leu	Gly	His	Glu	Ser	Asp	Asn	Leu	Leu	Phe	Val
	130					135					140				
Gln	Ile	Thr	Gly	Lys	Lys	Pro	Asn	Phe	Glu	Val	Gly	Ser	Ser	Arg	Gln
145					150					155				160	
Leu	Lys	Leu	Ser	Ile	Thr	Lys	Lys	Ser	Ser	Pro	Ser	Val	Lys	Pro	Ala

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<210> 5577
<211> 659
<212> DNA
<213> Homo sapiens
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<400> 5577
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120
cctgtggccg acatgagggc actcctgaca ggcaaggact gccccatgt ccgggagaag
180
ggctccggga agcagaacaa ggacctctat gagttggcct tctcaatcag ctatgaccgt
240
ggggaggagg aagcgtagct caacttcatt gccccctcca agcggggagtt ctacctgtgg
300
acagatgggc tcagtgcctt gctgggcagt cccatgggca gcgagcagac acggctggac
360
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480
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540
gcagccatga agggcagtg gtagaggagt gcaggcaccc tgaccagcag agattgctgc
600
agaaataaag tctgcttggc tcttgggaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa
659

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<210> 5578
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 5578
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 1 5 10 15
 Leu Leu Gln Tyr Gly Asp Met Glu Glu Gly Xaa Gln Pro Ala Tyr Pro
 20 25 30
 Xaa Glu Ser Leu Pro Glu Gln Leu Pro Val Ala Asp Met Arg Ala Leu
 35 40 45
 Leu Thr Gly Lys Asp Cys Pro His Val Arg Glu Lys Gly Ser Gly Lys
 50 55 60
 Gln Asn Lys Asp Leu Tyr Glu Leu Ala Phe Ser Ile Ser Tyr Asp Arg
 65 70 75 80
 Gly Glu Glu Glu Ala Tyr Leu Asn Phe Ile Ala Pro Ser Lys Arg Glu
 85 90 95
 Phe Tyr Leu Trp Thr Asp Gly Leu Ser Ala Leu Leu Gly Ser Pro Met
 100 105 110
 Gly Ser Glu Gln Thr Arg Leu Asp Leu Glu Gln Leu Leu Thr Met Glu
 115 120 125
 Thr Lys Leu Arg Leu Leu Glu Leu Glu Asn Val Pro Ile Pro Glu Arg
 130 135 140
 Pro Pro Pro Val Pro Pro Pro Pro Thr Asn Phe Asn Phe Cys Tyr Asp
 145 150 155 160
 Cys Ser Ile Ala Glu Pro
 165

<210> 5579
 <211> 1312
 <212> DNA
 <213> Homo sapiens

<400> 5579
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 ccagcaccgc ctcttcaacc atctgggggtg ccaacaagtg gaccatctca gaccaccata
 120
 cacttactac ctacagctcc aactaccgtg aatgtaacac atcgtccagt aactcaggtg
 180
 accacaagac tccctgtacc aagagctcct gcaaaccacc aggtggttta tacaactctt
 240
 cctgcaccac cagctcaggc tcccttgcca ggaactgtta tgcaggctcc tgctgttcgg
 300
 caggtcaatc cccaaaatag tggtacagtt cgagtgcctc aaacaaccac atatgttgta
 360
 aacaatggac taaccctggg atcaacagga cctcagctca cagtgcata cagaccacca
 420
 caagtgcata ctgagccccc acgccccgtg caccagcac ccttaccaga agctccacaa
 480
 ccacagcgtc tgccccaga agctgccagc acatctctgc ctcagaagcc acacttgaag
 540

ttagcacgcg ttcagagtca aaatggcata gtactgtcat ggagtgtcct ggaggtggat
 600
 cgaagctgtg ccactgttga tagctaccat ctctatgctt accatgagga acccagtgcc
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 720
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 840
 cagagcagtt aaaccttgga gcctttatat tttcctcttt taaaatttcc accttttggg
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 cttgttttta atcttgtgca tgatacccca tgtaaaatcc accttgtgca agatttcttg
 960
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 1200
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<210> 5580

<211> 283

<212> PRT

<213> Homo sapiens

<400> 5580

Thr	Pro	Val	Ser	Thr	Met	Ser	Ser	Ser	Gln	Pro	Val	Ser	Arg	Pro	Leu
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Gln	Pro	Ile	Gln	Pro	Ala	Pro	Pro	Leu	Gln	Pro	Ser	Gly	Val	Pro	Thr
			20					25					30		
Ser	Gly	Pro	Ser	Gln	Thr	Thr	Ile	His	Leu	Leu	Pro	Thr	Ala	Pro	Thr
			35				40					45			
Thr	Val	Asn	Val	Thr	His	Arg	Pro	Val	Thr	Gln	Val	Thr	Thr	Arg	Leu
			50			55					60				
Pro	Val	Pro	Arg	Ala	Pro	Ala	Asn	His	Gln	Val	Val	Tyr	Thr	Thr	Leu
65					70					75					80
Pro	Ala	Pro	Pro	Ala	Gln	Ala	Pro	Leu	Arg	Gly	Thr	Val	Met	Gln	Ala
				85					90					95	
Pro	Ala	Val	Arg	Gln	Val	Asn	Pro	Gln	Asn	Ser	Val	Thr	Val	Arg	Val
				100					105					110	
Pro	Gln	Thr	Thr	Thr	Tyr	Val	Val	Asn	Asn	Gly	Leu	Thr	Leu	Gly	Ser
			115				120						125		
Thr	Gly	Pro	Gln	Leu	Thr	Val	His	His	Arg	Pro	Pro	Gln	Val	His	Thr
			130			135						140			
Glu	Pro	Pro	Arg	Pro	Val	His	Pro	Ala	Pro	Leu	Pro	Glu	Ala	Pro	Gln
145					150					155					160
Pro	Gln	Arg	Leu	Pro	Pro	Glu	Ala	Ala	Ser	Thr	Ser	Leu	Pro	Gln	Lys

				165				170					175				
Pro	His	Leu	Lys	Leu	Ala	Arg	Val	Gln	Ser	Gln	Asn	Gly	Ile	Val	Leu		
				180				185					190				
Ser	Trp	Ser	Val	Leu	Glu	Val	Asp	Arg	Ser	Cys	Ala	Thr	Val	Asp	Ser		
				195				200					205				
Tyr	His	Leu	Tyr	Ala	Tyr	His	Glu	Glu	Pro	Ser	Ala	Thr	Val	Pro	Ser		
				210				215					220				
Gln	Trp	Lys	Lys	Ile	Gly	Glu	Val	Lys	Ala	Leu	Pro	Leu	Pro	Met	Ala		
				225				230				235			240		
Cys	Thr	Leu	Thr	Gln	Phe	Val	Ser	Gly	Ser	Lys	Tyr	Tyr	Phe	Ala	Val		
				245					250				255				
Arg	Ala	Lys	Asp	Ile	Tyr	Gly	Arg	Phe	Gly	Pro	Phe	Cys	Asp	Pro	Gln		
				260				265					270				
Ser	Thr	Asp	Val	Ile	Ser	Ser	Thr	Gln	Ser	Ser							
				275				280									

<210> 5581

<211> 720

<212> DNA

<213> Homo sapiens

<400> 5581

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120
gcgtcccgcg agctgcctgt ctctgtctgg caggtcaccg agccgtcaag caagaatctg
180
tgaggagcaga tctgcaagga gtatgaagct gaggcgcctc cctttccaga aggatataaa
240
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<210> 5582

<211> 212

<212> PRT

<213> Homo sapiens

<400> 5582

Met Ala Ala Pro Arg Gln Ile Pro Ser His Ile Val Arg Leu Lys Pro

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420
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<210> 5584

<211> 454

<212> PRT

<213> Homo sapiens

<400> 5584

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 Glu Arg Val Ala Ala Leu Gln Thr Val Gly Pro Thr Ala Gly Pro Ala
 35 40 45
 Pro Asn Ala Phe Thr Ser Thr Leu Glu Lys Val Gly Asp His Gln Phe
 50 55 60
 Leu Leu Tyr Ser Gly Arg Ser Pro Pro Thr Pro Thr Gly Leu Val His
 65 70 75 80
 Leu Val Val Val Ala Ala Lys Lys Leu Val Asn Arg Leu Gln Val Ala
 85 90 95
 Pro Lys Thr Gln Leu Asp Glu Thr Val Leu Trp Val Val His Val Ser
 100 105 110
 Gly Pro Ile Asn Pro Gln Val Leu Lys Ser Lys Ala Ala Lys Glu Leu
 115 120 125
 Lys Ala Leu Gln Asp Leu Ala Arg Lys Glu Met Leu Glu Leu Leu Asp
 130 135 140
 Met Pro Ala Ala Glu Leu Leu Gln Asp His Gln Leu Leu Trp Ala Gln
 145 150 155 160
 Leu Phe Ser Pro Gly Val Glu Met Lys Lys Ile Thr Asp Thr His Thr
 165 170 175
 Pro Ser Gly Leu Thr Val Asn Leu Thr Leu Tyr Tyr Met Leu Ser Cys
 180 185 190
 Ser Pro Ala Pro Leu Leu Ser Pro Ser Leu Ser His Arg Glu Arg Asp
 195 200 205
 Gln Met Glu Ser Thr Leu Asn Tyr Glu Asp His Cys Phe Ser Gly His
 210 215 220
 Ala Thr Met His Ala Glu Asn Leu Trp Pro Gly Arg Leu Ser Ser Val
 225 230 235 240
 Gln Gln Ile Leu Gln Leu Ser Asp Leu Trp Arg Leu Thr Leu Gln Lys
 245 250 255
 Arg Gly Cys Lys Gly Leu Val Lys Val Gly Ala Pro Gly Ile Leu Gln
 260 265 270
 Gly Met Val Leu Ser Phe Gly Gly Leu Gln Phe Thr Glu Asn His Leu
 275 280 285
 Gln Phe Gln Ala Asp Pro Asp Val Leu His Asn Ser Tyr Ala Leu His
 290 295 300
 Gly Ile Arg Tyr Lys Asn Asp His Ile Asn Leu Ala Val Leu Arg Met
 305 310 315 320
 Pro Arg Ala Ser Pro Thr Tyr Thr Cys Pro Trp Ser Pro Val Ala Ser
 325 330 335
 Leu Ser Xaa Ile Tyr Ala Cys Lys Ala Gly Cys Leu Asp Glu Pro Val
 340 345 350
 Glu Leu Thr Ser Ala Pro Thr Gly His Thr Phe Ser Val Met Val Thr
 355 360 365
 Gln Pro Ile Thr Pro Leu Leu Tyr Ile Ser Thr Asp Leu Thr His Leu
 370 375 380
 Gln Asp Leu Arg His Thr Leu His Leu Lys Ala Ile Leu Ala His Asp

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385          390          395          400
Glu His Met Ala Gln Gln Asp Pro Gly Leu Pro Phe Leu Phe Trp Phe
          405          410          415
Ser Val Ala Ser Leu Ile Thr Leu Phe His Leu Phe Leu Phe Lys Leu
          420          425          430
Ile Tyr Asn Glu Tyr Cys Gly Pro Gly Ala Lys Pro Leu Phe Arg Ser
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Lys Glu Asp Pro Ser Val
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<210> 5585

<211> 740

<212> DNA

<213> Homo sapiens

<400> 5585

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120
ctcacaagaa taaaatatac aatgctacat tgagtgggta aaaatacaca aaaaagtagt
180
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240
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600
tggaactgac ataagtaccc cagccacatg gccttcatcc ttatgaccta gcaggcagaa
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<210> 5586

<211> 87

<212> PRT

<213> Homo sapiens

<400> 5586

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Met Gly Ser Phe Gly Asp Ser Gly Ala Glu Leu Ser Ser Thr Ser Leu
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Gln Phe Pro Gly Ala Lys Gln Pro Ser Ser Pro Gln Tyr Leu Ser His
          20          25          30
Leu Lys Arg Ser Cys Pro Thr Tyr Leu Ser Pro Pro Gln Pro Lys Asp

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35 40 45
 Ser Ser Lys Leu Leu Cys Ser Met Thr Ala Ala Cys Pro Thr Leu Ser
 50 55 60
 Leu Leu Asp Leu Gln Leu Arg Leu Arg Arg Glu Val Gly Glu Gly His
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 Cys Pro Ile Leu Asp Leu Thr
 85

<210> 5587

<211> 853

<212> DNA

<213> Homo sapiens

<400> 5587

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 ttcattgttt tctcaatttg cttcagaaaa acttgcgga ttcgtccaca taaagtgtgc
 180
 acagtctcca aaaacttcag ctgaagggg taatacatgg attgaaagag attgtcttga
 240
 aagggaat cccgtattgc ttcataagat gctctgaacg ttggttgctt atcgtcatgg
 300
 tagacgcctc gggttccatg cagaacagac acaccttcat gctcagcctc tctgcagttg
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 420
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 720
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<210> 5588

<211> 204

<212> PRT

<213> Homo sapiens

<400> 5588

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 Ala Arg His Pro Phe Tyr Gly Ser Ala Gly Val Asn Ser Gly Val Met


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Leu Met Asn Leu Thr Arg Ile Arg Ser Thr Gln Phe Lys Asn Ser Met
      35      40      45
Ile Pro Thr Gly Leu Ala Trp Glu Asp Met Leu Tyr Pro Leu Tyr Gln
      50      55      60
Lys Tyr Lys Asn Ala Ile Thr Trp Gly Asp Gln Asp Leu Leu Asn Ile
65      70      75      80
Ile Phe Tyr Phe Asn Pro Glu Cys Leu Tyr Val Phe Pro Cys Gln Trp
      85      90      95
Asn Tyr Arg Pro Asp His Cys Met Tyr Gly Ser Asn Cys Arg Glu Ala
      100      105      110
Glu His Glu Gly Val Ser Val Leu His Gly Asn Arg Gly Val Tyr His
      115      120      125
Asp Asp Lys Gln Pro Thr Phe Arg Ala Leu Tyr Glu Ala Ile Arg Asp
      130      135      140
Phe Pro Phe Gln Asp Asn Leu Phe Gln Ser Met Tyr Tyr Pro Leu Gln
145      150      155      160
Leu Lys Phe Leu Glu Thr Val His Thr Leu Cys Gly Arg Ile Pro Gln
      165      170      175
Val Phe Leu Lys Gln Ile Glu Lys Thr Met Lys Arg Ala Tyr Glu Lys
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His Val Ile Ile His Val Gly Pro Asn Gln Met His
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<210> 5589

<211> 1327

<212> DNA

<213> Homo sapiens

<400> 5589

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180
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660
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720

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<210> 5590

<211> 207

<212> PRT

<213> Homo sapiens

<400> 5590

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			20					25					30		
Glu	Glu	Gln	Glu	Glu	Arg	Lys	Pro	Ser	Ala	Thr	Gln	Gln	Lys	Lys	Asn
		35				40						45			
Thr	Lys	Leu	Ser	Ser	Lys	Thr	Thr	Ala	Lys	Leu	Ser	Thr	Ser	Ala	Lys
	50				55					60					
Arg	Ile	Gln	Lys	Glu	Leu	Ala	Glu	Ile	Thr	Leu	Asp	Pro	Pro	Pro	Asn
65					70					75					80
Cys	Ser	Ala	Gly	Pro	Lys	Gly	Asp	Asn	Ile	Tyr	Glu	Trp	Arg	Ser	Thr
				85				90						95	
Ile	Leu	Gly	Pro	Pro	Gly	Ser	Val	Tyr	Glu	Gly	Gly	Val	Phe	Phe	Leu
			100					105					110		
Asp	Ile	Thr	Phe	Ser	Ser	Asp	Tyr	Pro	Phe	Lys	Pro	Pro	Lys	Val	Thr
	115						120						125		
Phe	Arg	Thr	Arg	Ile	Tyr	His	Cys	Asn	Ile	Asn	Ser	Gln	Gly	Val	Ile
	130					135					140				
Cys	Leu	Asp	Ile	Leu	Lys	Asp	Asn	Trp	Ser	Pro	Ala	Leu	Thr	Ile	Ser
145					150					155					160
Lys	Val	Leu	Leu	Ser	Ile	Cys	Ser	Leu	Leu	Thr	Asp	Cys	Asn	Pro	Ala
				165				170						175	
Asp	Pro	Leu	Val	Gly	Ser	Ile	Ala	Thr	Gln	Tyr	Leu	Thr	Asn	Arg	Ala
			180					185					190		
Glu	His	Asp	Arg	Ile	Ala	Arg	Gln	Trp	Thr	Lys	Arg	Tyr	Ala	Thr	

195

200

205

<210> 5591

<211> 2194

<212> DNA

<213> Homo sapiens

<400> 5591

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<210> 5592

<211> 580

<212> PRT

<213> Homo sapiens

<400> 5592

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			20					25					30		
Thr	Pro	Leu	Pro	Ser	Gly	Asp	Val	Ala	Ala	Thr	Phe	Gln	Phe	Arg	Thr
			35				40					45			
Arg	Trp	Asp	Ser	Asp	Leu	Gln	Arg	Glu	Gly	Val	Ser	His	Tyr	Arg	Leu
			50			55					60				
Phe	Pro	Lys	Ala	Leu	Gly	Gln	Leu	Ile	Ser	Lys	Tyr	Ser	Leu	Arg	Glu
65				70					75					80	
Leu	His	Leu	Ser	Phe	Thr	Gln	Gly	Phe	Trp	Arg	Thr	Arg	Tyr	Trp	Gly
				85				90						95	Pro Phe Leu
Gln	Ala	Pro	Ser	Gly	Ala	Glu	Leu	Trp	Val	Trp	Phe				
			100					105				110			
Gln	Asp	Thr	Val	Thr	Asp	Val	Asp	Lys	Ser	Trp	Arg	Glu	Leu	Ser	Asn
			115				120					125			
Val	Leu	Ser	Gly	Ile	Phe	Cys	Ala	Ser	Leu	Asn	Phe	Ile	Asp	Ser	Thr
			130			135					140				
Asn	Thr	Val	Thr	Pro	Thr	Ala	Ser	Phe	Lys	Pro	Leu	Gly	Leu	Ala	Asn

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Asp Thr Asp His Tyr Phe Leu Arg Tyr Ala Val Leu Pro Arg Glu Val															
				165					170						175
Val Cys Thr Glu Asn Leu Thr Pro Trp Lys Lys Leu Leu Pro Cys Ser															
			180					185						190	
Ser Lys Ala Gly Leu Ser Val Leu Leu Lys Ala Asp Arg Leu Phe His							200					205			
		195													
Thr Ser Tyr His Ser Gln Ala Val His Ile Arg Pro Val Cys Arg Asn							215					220			
		210													
Ala Arg Cys Thr Ser Ile Ser Trp Glu Leu Arg Gln Thr Leu Ser Val															
225				230					235						240
Val Phe Asp Ala Phe Ile Thr Gly Gln Gly Lys Lys Asp Trp Ser Leu															
			245						250						255
Phe Arg Met Phe Ser Arg Thr Leu Thr Glu Pro Cys Pro Leu Ala Ser															
			260					265						270	
Glu Ser Arg Val Tyr Val Asp Ile Thr Thr Tyr Asn Gln Pro Cys Leu							280					285			
		275													
Cys Val Gln Asp Asn Glu Thr Leu Glu Val His Pro Pro Pro Thr Thr							295					300			
		290													
Thr Tyr Gln Asp Val Ile Leu Gly Thr Arg Lys Thr Tyr Ala Ile Tyr															
305				310								315			320
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Gln Leu Lys Trp Lys Arg Pro Pro Glu Asn Glu Ala Pro Pro Val Pro															
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Glu Leu Ser Thr Leu Leu Tyr Asn Thr His Pro Tyr Arg Ala Phe Pro															
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Val Leu Leu Leu Asp Thr Val Pro Trp Tyr Leu Arg Leu Tyr Val His															
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		450					455						460		
Gly Phe Tyr Val Ser Pro Ser Val Leu Ser Ala Leu Val Pro Ser Met															
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Val Ala Ala Lys Pro Val Asp Trp Glu Glu Ser Pro Leu Phe Asn Ser															
			485						490						495
Leu Phe Pro Val Ser Asp Gly Ser Asn Tyr Phe Val Arg Leu Tyr Thr															
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<210> 5593

<211> 3078

<212> DNA

<213> Homo sapiens

<400> 5593

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<210> 5594

<211> 296

<212> PRT

<213> Homo sapiens

<400> 5594

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His	Val	Arg	Arg	Met	Phe	His	Pro	Gly	Arg	Gly	Leu	Gly	Gly	Pro	Arg
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Ala	Arg	Arg	Ser	Asn	Met	His	Phe	Thr	Ser	Ser	Ser	Thr	Gly	Gly	Leu
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Ser	Ser	Ser	Gln	Ser	Ser	Tyr	Ser	Pro	Ser	Asn	Arg	Glu	Ala	Met	Asp
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Pro	Ile	Ala	Glu	Leu	Leu	Ser	Gln	Leu	Ser	Gly	Val	Arg	Arg	Ser	Ala
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		180						185					190		
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	195						200					205			
Thr	Arg	Leu	Asn	Asp	Pro	Lys	Met	Ser	Glu	Thr	Glu	Arg	Gln	Ser	Met
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Glu	Ser	Glu	Arg	Ala	Asp	Arg	Ser	Leu	Phe	Val	Gln	Glu	Leu	Leu	Leu
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Ser	Thr	Leu	Val	Arg	Glu	Glu	Ser	Ser	Ser	Ser	Asp	Glu	Asp	Asp	Arg
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Gly	Glu	Met	Ala	Asp	Phe	Gly	Ala	Met	Gly	Cys	Val	Asp	Ile	Met	Pro
		260						265				270			
Leu	Asp	Val	Ala	Leu	Glu	Asn	Leu	Asn	Leu	Lys	Glu	Ser	Asn	Lys	Gly
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<211> 1515

<212> DNA

<213> Homo sapiens

<400> 5595
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<210> 5596
 <211> 299
 <212> PRT
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<400> 5596
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 35 40 45
 Leu Ser Leu Leu Thr Asn Arg Gly Ser Lys Met Phe Lys Leu Arg Gln
 50 55 60
 Met Arg Val Glu Lys Phe Ile Tyr Glu Asn His Pro Asp Val Phe Ser
 65 70 75 80
 Asp Ser Ser Met Asp His Phe Gln Lys Phe Leu Pro Thr Val Gly Gly
 85 90 95
 Gln Leu Gly Thr Ala Gly Gln Gly Phe Ser Tyr Ser Lys Ser Asn Gly
 100 105 110
 Arg Gly Gly Ser Gln Ala Gly Gly Ser Gly Ser Ala Gly Gln Tyr Gly
 115 120 125
 Ser Asp Gln Gln His His Leu Gly Ser Gly Ser Gly Ala Gly Gly Thr
 130 135 140
 Gly Gly Pro Ala Gly Gln Ala Gly Arg Gly Gly Ala Ala Gly Thr Ala
 145 150 155 160
 Gly Val Gly Glu Thr Gly Ser Gly Asp Gln Ala Gly Gly Glu Gly Lys
 165 170 175
 His Ile Thr Val Phe Lys Thr Tyr Ile Ser Pro Trp Glu Arg Ala Met
 180 185 190
 Gly Val Asp Pro Gln Gln Lys Met Glu Leu Gly Ile Asp Leu Leu Ala
 195 200 205
 Tyr Gly Ala Lys Ala Glu Leu Pro Lys Tyr Lys Ser Phe Asn Arg Thr
 210 215 220
 Ala Met Pro Tyr Gly Gly Tyr Glu Lys Ala Ser Lys Arg Met Thr Phe
 225 230 235 240
 Gln Met Pro Lys Phe Asp Leu Gly Pro Leu Leu Ser Glu Pro Leu Val
 245 250 255
 Leu Tyr Asn Gln Asn Leu Ser Asn Arg Pro Ser Phe Asn Arg Thr Pro
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<210> 5597
 <211> 2240
 <212> DNA
 <213> Homo sapiens

<400> 5597
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<211> 312

<212> PRT

<213> Homo sapiens

<400> 5598

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Gln	Ala	Leu	Thr	Gly	Asn	Glu	Gly	Arg	Val	Ser	Val	Glu	Asn	Ile	Lys
		35				40					45				
Gln	Leu	Leu	Gln	Ser	Ala	His	Lys	Glu	Ser	Ser	Phe	Asp	Ile	Ile	Leu
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Ser	Gly	Leu	Val	Pro	Gly	Ser	Thr	Thr	Leu	His	Ser	Ala	Glu	Ile	Leu
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Glu	Pro	Val	Glu	Thr	Ala	Val	Asp	Asn	Asn	Ser	Lys	Val	Lys	Thr	Ala
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			165					170					175		
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Ser	Met	Asp	Leu	Ile	Asp	Ser	Asp	Glu	Leu	Leu	Asp	Pro	Glu	Asp	Leu

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 245 250 255
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 260 265 270
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<210> 5599

<211> 4492

<212> DNA

<213> Homo sapiens

<400> 5599

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<210> 5600

<211> 923

<212> PRT

<213> Homo sapiens

<400> 5600

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			20					25				30			
Ala	Tyr	Val	Arg	Val	Leu	Asp	Leu	His	Lys	Lys	Pro	Phe	Leu	Ala	Lys
		35				40					45				
Tyr	Phe	Pro	Phe	Met	Asp	Leu	Lys	Leu	Arg	Ala	Ala	Ser	Pro	Ile	Ile
	50				55					60					
Thr	Leu	Val	Ala	Leu	Asp	Glu	Ala	Leu	Asp	Asn	Tyr	Thr	Ile	Thr	Phe
65					70					75				80	
Leu	Ile	Arg	Gly	Val	Ala	Ile	Gly	Gln	Thr	Ser	Leu	Thr	Ala	Ser	Val
			85					90					95		
Thr	Asn	Lys	Ala	Gly	Gln	Arg	Ile	Asn	Ser	Ala	Pro	Gln	Gln	Ile	Glu
		100						105				110			
Val	Phe	Pro	Pro	Phe	Arg	Leu	Met	Pro	Arg	Lys	Val	Thr	Leu	Leu	Ile
	115						120					125			
Gly	Ala	Thr	Met	Gln	Val	Thr	Ser	Glu	Gly	Gly	Pro	Gln	Pro	Gln	Ser
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Asn	Ile	Leu	Phe	Ser	Ile	Ser	Asn	Glu	Ser	Val	Ala	Leu	Val	Ser	Ala
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Ala	Gly	Leu	Val	Gln	Gly	Leu	Ala	Ile	Gly	Asn	Gly	Thr	Val	Ser	Gly
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Leu	Val	Gln	Ala	Val	Asp	Ala	Glu	Thr	Gly	Lys	Val	Val	Ile	Ile	Ser
		180						185					190		
Gln	Asp	Leu	Val	Gln	Val	Glu	Val	Leu	Leu	Leu	Arg	Ala	Val	Arg	Ile
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Arg	Ala	Pro	Ile	Met	Arg	Met	Arg	Thr	Gly	Thr	Gln	Met	Pro	Ile	Tyr
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Val	Pro	Gly	Leu	Thr	Phe	His	Trp	Ser	Val	Thr	Lys	Arg	Asp	Val	Leu
			245						250				255		
Asp	Leu	Arg	Gly	Arg	His	His	Glu	Ala	Ser	Ile	Arg	Leu	Pro	Ser	Gln
		260					265					270			
Tyr	Asn	Phe	Ala	Met	Asn	Val	Leu	Gly	Arg	Val	Lys	Gly	Arg	Thr	Gly
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Leu	Arg	Val	Val	Val	Lys	Ala	Val	Asp	Pro	Thr	Ser	Gly	Gln	Leu	Tyr
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Gly	Leu	Ala	Arg	Glu	Leu	Ser	Asp	Glu	Ile	Gln	Val	Gln	Val	Phe	Glu


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Lys Leu Gln Leu Leu Asn Pro Glu Ile Glu Ala Glu Gln Ile Leu Met
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Ser Pro Asn Ser Tyr Ile Lys Leu Gln Thr Asn Arg Asp Gly Ala Ala
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Ser Leu Ser Tyr Arg Val Leu Asp Gly Pro Glu Lys Val Pro Val Val
          355          360          365
His Val Asp Glu Lys Gly Phe Leu Ala Ser Gly Ser Met Ile Gly Thr
          370          375          380
Ser Thr Ile Glu Val Ile Ala Gln Glu Pro Phe Gly Ala Asn Gln Thr
385          390          395          400
Ile Ile Val Ala Val Lys Val Ser Pro Val Ser Tyr Leu Arg Val Ser
          405          410          415
Met Ser Pro Val Leu His Thr Gln Asn Lys Glu Ala Leu Val Ala Val
          420          425          430
Pro Leu Gly Met Thr Val Thr Phe Thr Val His Phe His Asp Asn Ser
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Gly Asp Val Phe His Ala His Ser Ser Val Leu Asn Phe Ala Thr Asn
          450          455          460
Arg Asp Asp Phe Val Gln Ile Gly Lys Gly Pro Thr Asn Asn Thr Cys
465          470          475          480
Val Val Arg Thr Val Ser Val Gly Leu Thr Leu Leu Arg Val Trp Asp
          485          490          495
Ala Glu His Pro Gly Leu Ser Asp Phe Met Pro Leu Pro Val Leu Gln
          500          505          510
Ala Ile Ser Pro Glu Leu Ser Gly Ala Met Val Val Gly Asp Val Leu
          515          520          525
Cys Leu Ala Thr Val Leu Thr Ser Leu Glu Gly Leu Ser Gly Thr Trp
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Ser Ser Ser Ala Asn Ser Ile Leu His Ile Asp Pro Lys Thr Gly Val
545          550          555          560
Ala Val Ala Arg Ala Val Gly Ser Val Thr Val Tyr Tyr Glu Val Ala
          565          570          575
Gly His Leu Arg Thr Tyr Lys Glu Val Val Val Ser Val Pro Gln Arg
          580          585          590
Ile Met Ala Arg His Leu His Pro Ile Gln Thr Ser Phe Gln Glu Ala
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Thr Ala Ser Lys Val Ile Val Ala Val Gly Asp Arg Ser Ser Asn Leu
          610          615          620
Arg Gly Glu Cys Thr Pro Thr Gln Arg Glu Val Ile Gln Ala Leu His
625          630          635          640
Pro Glu Thr Leu Ile Ser Cys Gln Ser Gln Phe Lys Pro Ala Val Phe
          645          650          655
Asp Phe Pro Ser Gln Asp Val Phe Thr Val Glu Pro Gln Phe Asp Thr
          660          665          670
Ala Leu Gly Gln Tyr Phe Cys Ser Ile Thr Met His Arg Leu Thr Asp
          675          680          685
Lys Gln Arg Lys His Leu Ser Met Lys Lys Thr Ala Leu Val Val Ser
          690          695          700
Ala Ser Leu Ser Ser Ser His Phe Ser Thr Glu Gln Val Gly Ala Glu
705          710          715          720
Val Pro Phe Ser Pro Gly Leu Phe Ala Asp Gln Ala Glu Ile Leu Leu
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Ser Asn His Tyr Thr Ser Ser Glu Ile Arg Val Phe Gly Ala Pro Glu

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<210> 5601
<211> 670
<212> DNA
<213> Homo sapiens
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300
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<210> 5602
 <211> 213
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Gly Gly Val Ile Glu Glu Leu Ser Cys Val Arg Ser Asn Asn Tyr Val
 50 55 60
 Gln Glu Pro Glu Cys Arg Arg Asn Leu Val Gln Cys Leu Leu Glu Lys
 65 70 75 80
 Gln Gly Thr Pro Val Val Gln Gly Ser Leu Glu Leu Glu Arg Val Met
 85 90 95
 Ser Ser Leu Leu Asp Met Gly Phe Ser Asn Ala His Ile Asn Glu Leu
 100 105 110
 Leu Ser Val Arg Arg Gly Ala Ser Leu Gln Gln Leu Leu Asp Ile Ile
 115 120 125
 Ser Glu Phe Ile Leu Leu Gly Leu Asn Pro Glu Pro Val Cys Val Val
 130 135 140
 Leu Lys Lys Ser Pro Gln Leu Leu Lys Leu Pro Ile Met Gln Met Arg
 145 150 155 160
 Lys Arg Ser Ser Tyr Leu Gln Lys Leu Gly Leu Gly Glu Gly Lys Leu
 165 170 175
 Lys Arg Val Leu Tyr Cys Cys Pro Glu Ile Phe Thr Met Arg Gln Gln
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 Asp Ile Asn Asp Thr Val Arg Leu Leu Lys Glu Lys Cys Leu Phe Thr
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 Val Pro Leu His Ala
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<210> 5603
 <211> 2070
 <212> DNA
 <213> Homo sapiens

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<210> 5604

<211> 560

<212> PRT

<213> Homo sapiens

<400> 5604

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His	Val	Cys	Arg	Pro	Pro	Gly	Asn	Val	Ser	Gln	Val	Val	Phe	His	Asn
		35					40					45			
His	Ser	Asn	Trp	Ser	Leu	Glu	Asp	Thr	Gly	Ala	Leu	Leu	Ser	Ser	Gly
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Gln	Lys	Asp	Tyr	Val	Thr	Val	Gln	Leu	Gln	Asn	Gly	Glu	Ile	Trp	Glu
65					70				75						80
Leu	Ser	Arg	Cys	Ser	Arg	Asn	Lys	Arg	Glu	Asn	Thr	Ser	Ser	Leu	Gly
				85					90					95	
Tyr	Glu	Tyr	Thr	Gly	Ser	Lys	Lys	Glu	Phe	Pro	Cys	Val	Asp	Gly	Tyr
			100					105					110		
Ile	Tyr	Asp	Gln	Asn	Thr	Trp	Lys	Ser	Thr	Ala	Val	Thr	Gln	Trp	Asn
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Arg	Leu	Gly	Arg	Arg	Val	Val	Leu	Trp	Ala	Thr	Ser	Ser	Ser	Met	Phe
				165					170					175	
Leu	Phe	Gly	Ile	Ala	Ala	Ala	Phe	Ala	Val	Asp	Tyr	Tyr	Thr	Phe	Met
			180					185					190		
Ala	Ala	Arg	Phe	Phe	Leu	Ala	Met	Val	Ala	Ser	Gly	Tyr	Leu	Val	Val
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Gly	Phe	Val	Tyr	Val	Met	Glu	Phe	Ile	Gly	Met	Lys	Ser	Arg	Thr	Trp
	210					215					220				
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Ala	Leu	Thr	Gly	Tyr	Leu	Val	Arg	Thr	Trp	Trp	Leu	Tyr	Gln	Met	Ile
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Leu	Ser	Thr	Val	Thr	Val	Pro	Phe	Ile	Leu	Cys	Cys	Trp	Val	Leu	Pro
		260						265					270		
Glu	Thr	Pro	Phe	Trp	Leu	Leu	Ser	Glu	Gly	Arg	Tyr	Glu	Glu	Ala	Gln
		275					280					285			
Lys	Ile	Val	Asp	Ile	Met	Ala	Lys	Trp	Asn	Arg	Ala	Ser	Ser	Cys	Lys
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Leu	Ser	Glu	Leu	Leu	Ser	Leu	Asp	Leu	Gln	Gly	Pro	Val	Ser	Asn	Ser
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Pro	Thr	Glu	Val	Gln	Lys	His	Asn	Leu	Ser	Tyr	Leu	Phe	Tyr	Asn	Trp
			325						330					335	
Ser	Ile	Thr	Lys	Arg	Thr	Leu	Thr	Val	Trp	Leu	Ile	Trp	Phe	Thr	Gly

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          370          375          380
Tyr Thr Phe Val Cys Ile Ala Met Asp Lys Val Gly Arg Arg Thr Val
385          390          395          400
Leu Ala Tyr Ser Leu Phe Cys Ser Ala Leu Ala Cys Gly Val Val Met
          405          410          415
Val Ile Pro Gln Lys His Tyr Ile Leu Gly Val Val Thr Ala Met Val
          420          425          430
Gly Lys Phe Ala Ile Gly Ala Ala Phe Gly Leu Ile Tyr Leu Tyr Thr
          435          440          445
Ala Glu Leu Tyr Pro Thr Ile Val Arg Ser Leu Ala Val Gly Ser Gly
          450          455          460
Ser Met Val Cys Arg Leu Ala Ser Ile Leu Ala Pro Phe Ser Val Asp
465          470          475          480
Leu Ser Ser Ile Trp Ile Phe Ile Pro Gln Leu Phe Val Gly Thr Met
          485          490          495
Ala Leu Leu Ser Gly Val Leu Thr Leu Lys Leu Pro Glu Thr Leu Gly
          500          505          510
Lys Arg Leu Ala Thr Thr Trp Glu Glu Ala Ala Lys Leu Glu Ser Glu
          515          520          525
Asn Glu Ser Lys Ser Ser Lys Leu Leu Leu Thr Thr Asn Asn Ser Gly
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Leu Glu Lys Thr Glu Ala Ile Thr Pro Arg Asp Ser Gly Leu Gly Glu
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<210> 5605

<211> 376

<212> DNA

<213> Homo sapiens

<400> 5605

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360
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<210> 5606

<211> 101

<212> PRT

<213> Homo sapiens

<400> 5606

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Met Thr Arg Ala Leu Leu Thr Ser Leu Val Leu Leu Pro Ala Arg Gln
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Ala His Pro Cys Arg Ala Leu Ala Leu Thr Ala Pro Ile Phe Leu Leu
      20             25             30
Leu Phe Pro Ser Ser Glu Cys Gly Trp Phe Ser Leu Leu Leu Ser Ser
      35             40             45
Asp Val Pro Ser Ser Ser Leu Glu Arg Pro Pro Trp Met Thr Glu Glu
      50             55             60
Val Thr Thr Thr Ser Ser Arg Ser Thr Pro Arg Pro Ser Val Ser Pro
65             70             75             80
Ser Gln Cys Leu Ala Pro Ser Asn Ile Ala Phe Cys Val Tyr His Gln
      85             90             95
Phe Pro Phe Thr Arg
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<210> 5607

<211> 320

<212> DNA

<213> Homo sapiens

<400> 5607

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120
gggaagtgcg tggaccagtg tgtggagacc ctgcagaagc agaccagggt tggcaaggct
180
ggcaccaaca agccccccag gtgccgggga agaggggcca ggcttggggg cgcgccagct
240
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300
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320

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<210> 5608

<211> 106

<212> PRT

<213> Homo sapiens

<400> 5608

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Val His Thr Arg Gly Ile Gly Ser Arg Leu Leu Thr Lys Met Gly Tyr
 1             5             10             15
Glu Phe Gly Lys Gly Leu Gly Arg His Ala Glu Gly Arg Val Glu Pro
      20             25             30
Ile His Ala Val Val Leu Pro Arg Gly Lys Ser Leu Asp Gln Cys Val
      35             40             45
Glu Thr Leu Gln Lys Gln Thr Arg Val Gly Lys Ala Gly Thr Asn Lys
      50             55             60
Pro Pro Arg Cys Arg Gly Arg Gly Ala Arg Pro Gly Gly Arg Pro Ala
65             70             75             80
Pro Arg Asn Val Phe Asp Phe Leu Asn Glu Lys Leu Gln Gly Gln Ala
      85             90             95
Pro Gly Ala Leu Gln Ala Gly Arg Pro Gln

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100

105

<210> 5609

<211> 1843

<212> DNA

<213> Homo sapiens

<400> 5609

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120
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240
taaaaataga cccgtattga tcatacaaat ctatcatgag aagttacca gtgagagtga
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gttattgtaa ttctgaatgt actcatcgtg tttctcactt ctacagaagc atcctcagt
360
agttgtattg tgcgagaaaa tgacaccctt gccacatca ctctccattc catagagggg
420
cacaacccta tctagccaaa ccagaagaa cgcaggcgct tacacaactt ttctcggaca
480
gtcgagaaaa tccaaaagtg ggctttgggc ttaccttaaa taggaatgga atgtaccact
540
acgagatggg catcataata aggacattgt tgtttgagcg gggggtgtgc aatcagtata
600
aatgaggatg gcggaggaag aggagtggg actgaagga ggtgggtgcat aataagtga
660
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720
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780
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1380

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 1680
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 1740
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 1843

<210> 5610

<211> 153

<212> PRT

<213> Homo sapiens

<400> 5610

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Phe	Thr	Ala	Cys	Ser	Ser	Arg	Val	Gln	Met	Ala	Cys	Ile	Cys	Ala	Val
		20						25					30		
Phe	Thr	Gly	Gly	Arg	Gln	Asp	His	Thr	Ser	Leu	Pro	His	Trp	Ala	Cys
		35				40						45			
Leu	Leu	Val	Asp	Ser	Cys	Met	Gln	Glu	Ala	Val	Met	Gly	Ser	Leu	Arg
	50				55						60				
Ile	Pro	Gln	Cys	Gly	Asn	Gly	Pro	Leu	Arg	Leu	Val	Leu	Arg	Val	Pro
65				70				75						80	
Gly	Ala	Gln	Ser	Trp	Val	Gly	Gly	Cys	Trp	Trp	Glu	Val	Arg	Asn	Lys
		85						90						95	
Phe	Trp	Leu	Pro	Ser	Gly	Gln	Leu	Pro	Thr	Ala	Leu	Thr	Trp	Glu	Val
		100						105						110	
Asp	Ala	His	Arg	Gln	Asp	Ala	Leu	Gly	Tyr	Cys	Cys	Thr	Val	Leu	His
		115				120						125			
Glu	Ile	Phe	Ile	Gln	Pro	Thr	Arg	Phe	Asn	Arg	Ser	Leu	Gly	Ser	Ser
	130				135						140				
Ser	Arg	Leu	Leu	Cys	Leu	Phe	Lys	His							
145					150										

<210> 5611

<211> 1152

<212> DNA

<213> Homo sapiens

<400> 5611

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cgggtcctgg cgcctcagag cccggcccag gccgcggaac ggtgatgctc gggccggacg
 180
 ggcgagcgcg gatccctgcg tcccgcgtgaa aatgtgtgtc tgacatgcaa gctcagtggg
 240
 gcagagaccc gtggattgct gtgccctgcc ctccggacct ggatcatgaa ggtgttgagg
 300
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 420
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 480
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 540
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 660
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 720
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 780
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 840
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 960
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 1020
 attgactccc agaacaacca gtatattttg accaagccca gagattcaac catcccacgt
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 1152

<210> 5612

<211> 289

<212> PRT

<213> Homo sapiens

<400> 5612

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Pro	Trp	Ala	Val	Gln	Ala	Val	Glu	His	Glu	Glu	Val	Ala	Gln	Arg	Val
			20					25					30		
Ile	Lys	Leu	His	Arg	Gly	Arg	Gly	Val	Ala	Ala	Met	Gln	Ser	Arg	Gln
		35				40						45			
Trp	Val	Arg	Asp	Ser	Cys	Arg	Lys	Leu	Ser	Gly	Leu	Leu	Arg	Gln	Lys
	50				55					60					
Asn	Ala	Val	Leu	Asn	Lys	Leu	Lys	Thr	Ala	Ile	Gly	Ala	Val	Glu	Lys
65				70				75						80	
Asp	Val	Gly	Leu	Ser	Asp	Glu	Glu	Lys	Leu	Phe	Gln	Val	His	Thr	Phe

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600
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 960
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 1080
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 1560
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<210> 5614

<211> 242

<212> PRT

<213> Homo sapiens

<400> 5614

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Ser	Leu	Ala	Ala	Ala	Ala	Glu	Leu	Ala	Ala	Gln	Lys	Arg	Glu	Gln	Arg
		20					25					30			
Leu	Arg	Lys	Phe	Arg	Glu	Leu	His	Leu	Met	Arg	Asn	Glu	Ala	Arg	Lys
	35					40					45				
Leu	Asn	His	Gln	Glu	Val	Val	Glu	Glu	Asp	Lys	Arg	Leu	Lys	Leu	Pro
	50					55					60				
Ala	Asn	Trp	Glu	Ala	Lys	Lys	Ala	Arg	Leu	Glu	Trp	Glu	Leu	Lys	Glu
65				70				75						80	
Glu	Glu	Lys	Lys	Lys	Glu	Cys	Ala	Ala	Arg	Gly	Glu	Asp	Tyr	Glu	Lys

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<400> 5615
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660
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720
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780

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<210> 5616

<211> 507

<212> PRT

<213> Homo sapiens

<400> 5616

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 Gln Gln Gln Gln Gln Gly Val Leu Pro Gln Thr Val Pro Ser Gln Pro
 35 40 45
 Ser Ser Ser Thr Val Pro Pro Pro Pro His Arg Pro Leu Tyr Gln Pro
 50 55 60
 Met Gln Pro His Pro Gln His Leu Ala Ser Met Gly Phe Asp Pro Arg
 65 70 75 80
 Trp Leu Met Met Gln Ser Tyr Met Asp Pro Arg Met Met Ser Gly Arg
 85 90 95
 Pro Ala Met Asp Ile Pro Pro Ile His Pro Gly Met Ile Pro Pro Lys
 100 105 110
 Pro Leu Met Arg Arg Asp Gln Met Glu Gly Ser Pro Asn Ser Ser Glu
 115 120 125
 Ser Phe Glu His Ile Ala Arg Ser Ala Arg Asp His Ala Ile Ser Leu
 130 135 140
 Ser Glu Pro Arg Met Leu Trp Gly Ser Asp Pro Tyr Pro His Ala Glu
 145 150 155 160
 Pro Gln Gln Ala Thr Thr Pro Lys Ala Thr Glu Glu Pro Glu Asp Val

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      165      170      175
Arg Ser Glu Ala Ala Leu Asp Gln Glu Gln Ile Thr Ala Ala Tyr Ser
      180      185      190
Val Glu His Asn Gln Leu Glu Ala His Pro Lys Ala Asp Phe Ile Arg
      195      200      205
Glu Ser Ser Glu Ala Gln Val Gln Lys Phe Leu Ser Arg Ser Val Glu
      210      215      220
Asp Val Arg Pro His His Thr Asp Ala Asn Asn Gln Ser Ala Cys Phe
      225      230      235
Glu Ala Pro Asp Gln Lys Thr Leu Ser Thr Pro Gln Glu Glu Arg Ile
      245      250      255
Ser Ala Val Glu Ser Gln Pro Ser Arg Lys Arg Ser Val Ser His Gly
      260      265      270
Ser Asn His Thr Gln Lys Pro Asp Glu Gln Arg Ser Glu Pro Ser Ala
      275      280      285
Gly Ile Pro Lys Val Thr Ser Arg Cys Ile Asp Ser Lys Glu Pro Ile
      290      295      300
Glu Arg Pro Glu Glu Lys Pro Lys Lys Glu Gly Phe Ile Arg Ser Ser
      305      310      315
Glu Gly Pro Lys Pro Glu Lys Val Tyr Lys Ser Lys Ser Glu Thr Arg
      325      330      335
Trp Gly Pro Arg Pro Ser Ser Asn Arg Arg Glu Glu Val Asn Asp Arg
      340      345      350
Pro Val Arg Arg Ser Gly Pro Ile Lys Lys Pro Val Leu Arg Asp Met
      355      360      365
Lys Glu Glu Arg Glu Gln Arg Lys Glu Lys Glu Gly Glu Lys Ala Glu
      370      375      380
Lys Val Thr Glu Lys Val Val Val Lys Pro Glu Lys Thr Glu Lys Lys
      385      390      395
Asp Leu Pro Pro Pro Pro Pro Pro Gln Pro Pro Ala Pro Ile Gln
      405      410      415
Pro Gln Ser Val Pro Pro Pro Ile Gln Pro Glu Ala Glu Lys Phe Pro
      420      425      430
Ser Thr Glu Thr Ala Thr Leu Ala Gln Lys Pro Ser Gln Asp Thr Glu
      435      440      445
Lys Pro Leu Glu Pro Val Ser Thr Val Gln Val Glu Pro Ala Val Lys
      450      455      460
Thr Val Asn Gln Gln Thr Met Ala Ala Pro Val Val Lys Glu Lys Glu
      465      470      475
Leu Gln Lys Lys Glu Arg Lys Gln Glu Lys Glu Lys Glu Leu Glu Arg
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Gln Lys Glu Lys Glu Lys Glu Leu Gln Lys Lys
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<210> 5617

<211> 3480

<212> DNA

<213> Homo sapiens

<400> 5617

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120

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2340
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2400
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2520
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2640
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2700
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2880
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3300
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3360

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 3480

<210> 5618

<211> 1003

<212> PRT

<213> Homo sapiens

<400> 5618

His	Lys	Asp	Ser	Ile	Ser	Leu	Phe	Met	Ala	His	Val	His	Thr	Thr	Val
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Asn	Glu	Met	Ser	Thr	Arg	Tyr	Tyr	Gln	Asn	Glu	Arg	Arg	His	Asn	Tyr
			20					25					30		
Thr	Thr	Pro	Lys	Ser	Phe	Leu	Glu	Gln	Ile	Ser	Leu	Phe	Lys	Asn	Leu
			35				40					45			
Leu	Lys	Lys	Lys	Gln	Asn	Glu	Val	Ser	Glu	Lys	Lys	Glu	Arg	Leu	Val
	50				55					60					
Asn	Gly	Ile	Gln	Lys	Leu	Lys	Thr	Thr	Ala	Ser	Gln	Val	Gly	Asp	Leu
65					70				75					80	
Lys	Ala	Arg	Leu	Ala	Ser	Gln	Glu	Ala	Glu	Leu	Gln	Leu	Arg	Asn	His
				85				90						95	
Asp	Ala	Glu	Ala	Leu	Ile	Thr	Lys	Ile	Gly	Leu	Gln	Thr	Glu	Lys	Val
			100					105					110		
Ser	Arg	Glu	Lys	Thr	Ile	Ala	Asp	Ala	Glu	Glu	Arg	Lys	Val	Thr	Ala
	115					120						125			
Ile	Gln	Thr	Glu	Val	Phe	Gln	Lys	Gln	Arg	Glu	Cys	Glu	Ala	Asp	Leu
	130					135					140				
Leu	Lys	Ala	Glu	Pro	Ala	Leu	Val	Ala	Ala	Thr	Ala	Ala	Leu	Asn	Thr
145					150				155					160	
Leu	Asn	Arg	Val	Asn	Leu	Ser	Glu	Leu	Lys	Ala	Phe	Pro	Asn	Pro	Pro
			165					170						175	
Ile	Ala	Val	Thr	Asn	Val	Thr	Ala	Ala	Val	Met	Val	Leu	Leu	Ala	Pro
		180					185					190			
Arg	Gly	Arg	Val	Pro	Lys	Asp	Arg	Ser	Trp	Lys	Ala	Ala	Lys	Val	Phe
	195					200						205			
Met	Gly	Lys	Val	Asp	Asp	Phe	Leu	Gln	Ala	Leu	Ile	Asn	Tyr	Asp	Lys
	210				215						220				
Glu	His	Ile	Pro	Glu	Asn	Cys	Leu	Lys	Val	Val	Asn	Glu	His	Tyr	Leu
225					230					235				240	
Lys	Asp	Pro	Glu	Phe	Asn	Pro	Asn	Leu	Ile	Arg	Thr	Lys	Ser	Phe	Ala
			245					250						255	
Ala	Ala	Gly	Leu	Cys	Ala	Trp	Val	Ile	Asn	Ile	Ile	Lys	Phe	Tyr	Glu
		260					265						270		
Val	Tyr	Cys	Asp	Val	Glu	Pro	Lys	Arg	Gln	Ala	Leu	Ala	Gln	Ala	Asn
	275					280						285			
Leu	Glu	Leu	Ala	Ala	Ala	Thr	Glu	Lys	Leu	Glu	Ala	Ile	Arg	Lys	Lys
	290					295					300				
Leu	Val	Val	Ser	Ala	Asn	Tyr	Asp	Ile	Glu	Lys	Ser	Glu	Lys	Ile	Arg
305					310					315				320	
Trp	Gly	Gln	Ser	Ile	Lys	Ser	Phe	Glu	Ala	Gln	Glu	Lys	Thr	Leu	Cys
			325					330						335	
Gly	Asp	Val	Leu	Leu	Thr	Ala	Ala	Phe	Val	Ser	Tyr	Val	Gly	Pro	Phe

[illegible]

770	775	780
Trp Val Glu Ser Glu Cys Pro Glu Lys Glu Lys Leu Pro Gln Glu Trp		
785	790	795
Lys Lys Lys Ser Leu Ile Gln Lys Leu Ile Leu Leu Arg Ala Met Arg		800
	805	810
Pro Asp Arg Met Thr Tyr Ala Leu Arg Asn Phe Val Glu Glu Lys Leu		815
	820	825
Gly Ala Lys Tyr Val Glu Arg Thr Arg Leu Asp Leu Val Lys Ala Phe		830
	835	840
Glu Glu Ser Ser Pro Ala Thr Pro Ile Phe Phe Ile Leu Ser Pro Gly		845
	850	855
Val Asp Ala Leu Lys Asp Leu Glu Ile Leu Gly Lys Arg Leu Gly Phe		860
865	870	875
Thr Ile Asp Ser Gly Lys Phe His Asn Val Ser Leu Gly Gln Gly Gln		880
	885	890
Glu Thr Val Ala Glu Val Ala Leu Glu Lys Ala Ser Lys Gly Gly His		895
	900	905
Trp Val Ile Leu Gln Asn Val His Leu Val Ala Lys Trp Leu Gly Thr		910
	915	920
Leu Glu Lys Leu Leu Glu Arg Phe Ser Gln Gly Ser His Arg Asp Tyr		925
	930	935
Arg Val Phe Met Ser Ala Glu Ser Ala Pro Thr Pro Asp Glu His Ile		940
945	950	955
Ile Pro Gln Gly Leu Leu Glu Asn Ser Ile Lys Ile Thr Asn Glu Pro		960
	965	970
Pro Thr Gly Met Leu Ala Asn Leu His Ala Ala Leu Tyr Asn Phe Asp		975
	980	985
Gln Val Arg Lys Arg Ser Arg Leu Gly Arg Gln		990
	995	1000

<210> 5619

<211> 1219

<212> DNA

<213> Homo sapiens

<400> 5619

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120
cagtgtgcca gctgctagaa aacaggggaag atattagcca atatggaatt gccaggttct
180
tcaactgaata ttttaacagt gtatgccagg gaacacacat tctctttcga gaattcagct
240
tcgtccaagc cccccccac aatagggtat catttttacg ggccttctgg agatgcttcc
300
gaactgtggg caaaaatggc gatttgctga ccatgaaaga atatcactgt ttgctgcaat
360
tactgtgtcc tgatttcccg ctggagctca ctcagaaagc agccaggatt gtgctcatgg
420
acgatgccat ggactgcttg atgtcttttt cagatttcct ctttgccctc cagatccagt
480
tttactactc agaattcctg gacagtgtgg ctgccatcta tgaggacctg ctgtcaggca
540

agaaccccaa cacagtgatt gtgccgacgt cgtccagtgg gcagcaccgc caacgacctg
 600
 ccttgggcgg ggccggcaag ctggagggcg tggaggcgtc gctgttctac cagtgtctgg
 660
 aaaacctgtg tgatcggcac aagtacagct gccaccccc agcacttgtc aaagaggccc
 720
 tcagcaatgt tcagagactg accttctatg gattcctcat ggctctctca aagcaccgtg
 780
 gaatcaacca agccctcggg aagtcagagc taagcagccg tcagcctctc ctgccgcaca
 840
 acacagggag cagctggcct ctgttagcaa cacggctcca gagggggaagg ggcattacca
 900
 tctctgcctt gacttcccag ggccggactc aatcccaggg agcaggaata tggcgacaaa
 960
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 1020
 aacatgaaac cacctcccca tagcagaagc gccagcccc tcctcagaga accccagctc
 1080
 tgctttgggg agcagcctgc aggtcgggca gacacaggac tatttactca gtgacgctag
 1140
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 1200
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 1219

<210> 5620

<211> 333

<212> PRT

<213> Homo sapiens

<400> 5620

Met	Leu	Ser	Pro	Glu	Arg	Leu	Ala	Leu	Pro	Asp	Tyr	Glu	Tyr	Leu	Ala
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Gln	Arg	His	Val	Leu	Thr	Tyr	Met	Glu	Asp	Ala	Val	Cys	Gln	Leu	Leu
		20					25					30			
Glu	Asn	Arg	Glu	Asp	Ile	Ser	Gln	Tyr	Gly	Ile	Ala	Arg	Phe	Phe	Thr
	35					40					45				
Glu	Tyr	Phe	Asn	Ser	Val	Cys	Gln	Gly	Thr	His	Ile	Leu	Phe	Arg	Glu
	50					55				60					
Phe	Ser	Phe	Val	Gln	Ala	Thr	Pro	His	Asn	Arg	Val	Ser	Phe	Leu	Arg
65				70					75					80	
Ala	Phe	Trp	Arg	Cys	Phe	Arg	Thr	Val	Gly	Lys	Asn	Gly	Asp	Leu	Leu
			85					90					95		
Thr	Met	Lys	Glu	Tyr	His	Cys	Leu	Leu	Gln	Leu	Leu	Cys	Pro	Asp	Phe
			100					105					110		
Pro	Leu	Glu	Leu	Thr	Gln	Lys	Ala	Ala	Arg	Ile	Val	Leu	Met	Asp	Asp
		115					120					125			
Ala	Met	Asp	Cys	Leu	Met	Ser	Phe	Ser	Asp	Phe	Leu	Phe	Ala	Phe	Gln
	130					135					140				
Ile	Gln	Phe	Tyr	Tyr	Ser	Glu	Phe	Leu	Asp	Ser	Val	Ala	Ala	Ile	Tyr
145				150					155					160	
Glu	Asp	Leu	Leu	Ser	Gly	Lys	Asn	Pro	Asn	Thr	Val	Ile	Val	Pro	Thr
			165					170					175		
Ser	Ser	Ser	Gly	Gln	His	Arg	Gln	Arg	Pro	Ala	Leu	Gly	Gly	Ala	Gly

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                180                185                190
Thr Leu Glu Gly Val Glu Ala Ser Leu Phe Tyr Gln Cys Leu Glu Asn
                195                200                205
Leu Cys Asp Arg His Lys Tyr Ser Cys Pro Pro Pro Ala Leu Val Lys
                210                215                220
Glu Ala Leu Ser Asn Val Gln Arg Leu Thr Phe Tyr Gly Phe Leu Met
225                230                235                240
Ala Leu Ser Lys His Arg Gly Ile Asn Gln Ala Leu Gly Lys Ser Glu
                245                250                255
Leu Ser Ser Arg Gln Pro Leu Leu Pro His Asn Thr Gly Ser Ser Trp
                260                265                270
Pro Leu Leu Ala Thr Arg Leu Gln Arg Gly Arg Gly Ile Thr Ile Ser
                275                280                285
Ala Leu Thr Ser Gln Gly Arg Thr Gln Ser Gln Gly Ala Gly Ile Trp
                290                295                300
Arg Gln Asn Met Ala Leu Thr His Ser His Gly Arg Gly Gln Pro Ser
305                310                315                320
Leu Pro Ala Ala Leu Pro Gln His Glu Thr Thr Ser Pro
                325                330

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<210> 5621
 <211> 456
 <212> DNA
 <213> Homo sapiens

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<400> 5621
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gccggccggg ctcacatggt ttgtacaata aatacatctg tggggcgggc tctccgcagc
120
cggaaggggc caccgccacg gttagtcca gtttccgggc tcccagcttc atggggccct
180
tgccacctt cctctcggcg cgtttggcct ccatctcccg ccgcccgtcc tcgcgttct
240
tccggggcag ctcagccttg acctgtcctg ggtgctggga cgtgcagaca gggtagcgaa
300
ggggtcgccc ttgtcgctgg actctgggcc accccagtta tactcgctgg ccagccgtgt
360
accgtcagga ggtggctcct gggagcttgg ctgaaccgt ggcgggggcc cttcccggt
420
gcggagagcc cgccccacag atgtatttat tgtaca
456

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<210> 5622
 <211> 82
 <212> PRT
 <213> Homo sapiens

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<400> 5622
Met Ala Trp Leu Gly Arg Pro Gly Ser His Gly Leu Tyr Asn Lys Tyr
1         5         10         15
Ile Cys Gly Ala Gly Ser Pro Gln Pro Gly Arg Ala Thr Ala Thr Val
20        25        30
Gln Ser Ser Phe Arg Ala Pro Ser Phe Met Gly Pro Leu Ala Thr Phe

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```

      35              40              45
Leu Ser Ala Arg Leu Ala Ser Ile Ser Arg Arg Arg Ser Ser Arg Phe
      50              55              60
Phe Arg Ala Ser Ser Ala Leu Thr Cys Pro Gly Cys Trp Asp Val Gln
      65              70              75              80
Thr Gly

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<210> 5623
 <211> 357
 <212> DNA
 <213> Homo sapiens

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<400> 5623
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gcctttgatg attttcaaga gagttgtgct atgatgtggc aaaagtatgc aggaagcagg
120
cggtaaatgc ctctgggagc aaggatcctt ttccacggtg tggtctatgc cgggggcttt
180
gccattgtgt attacctcat tcaaaagttt cattccaggc ctttatatta caagttggca
240
gtggagcagc tgcagagcca tcccgaggca caggaagctc tgggccctcc tctcaacatc
300
cattatctca agctcatcga cagggaaaac ttcgtggaca ttgttgatgc caagttg
357

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<210> 5624
 <211> 88
 <212> PRT
 <213> Homo sapiens

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<400> 5624
Met Trp Gln Lys Tyr Ala Gly Ser Arg Arg Ser Met Pro Leu Gly Ala
1      5      10      15
Arg Ile Leu Phe His Gly Val Phe Tyr Ala Gly Gly Phe Ala Ile Val
      20      25      30
Tyr Tyr Leu Ile Gln Lys Phe His Ser Arg Ala Leu Tyr Tyr Lys Leu
      35      40      45
Ala Val Glu Gln Leu Gln Ser His Pro Glu Ala Gln Glu Ala Leu Gly
      50      55      60
Pro Pro Leu Asn Ile His Tyr Leu Lys Leu Ile Asp Arg Glu Asn Phe
      65      70      75      80
Val Asp Ile Val Asp Ala Lys Leu
      85

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<210> 5625
 <211> 1017
 <212> DNA
 <213> Homo sapiens

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<400> 5625
gccgactcgt ggtacctggc gcttctgggc ttcgctgagc acttccgcac ttccagcccg
60

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cccaaaatcc gcctgtgcgt gcaactgcctg caggccgtgt tccccttcaa gccgccgcag
 120
 cgcacgcagg cccgtacaca cctgcagctg ggctccgttc tctatcacca caccaagaac
 180
 agcgcagcagg cgcgagcca cctggagaag gcgtgggtga tatcacagca aatcccacag
 240
 ttcgaagatg ttaaatttga agcagcaagt ctgttgtctg aattgtactg tcaagagaat
 300
 tccgttgatg cagcaaagcc gctgctgcgg aaggcgatcc agatctcaca gcagacccca
 360
 tattggcact gccgcctgct cttccagctc gctcaactgc acacgcttga gaaggacctg
 420
 gtgtcggcct gtgacctcct ggggtgtaggg gccgagtagc cccgggtggg gggatctgaa
 480
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 540
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 600
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 660
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 720
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 780
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 840
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 900
 aagctcaaga tgctggactg cagccccatc ctgtcatcct tccaagtgat cctgctggag
 960
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 1017

<210> 5626

<211> 339

<212> PRT

<213> Homo sapiens

<400> 5626

Ala	Asp	Ser	Trp	Tyr	Leu	Ala	Leu	Leu	Gly	Phe	Ala	Glu	His	Phe	Arg
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Thr	Ser	Ser	Pro	Pro	Lys	Ile	Arg	Leu	Cys	Val	His	Cys	Leu	Gln	Ala
			20					25					30		
Val	Phe	Pro	Phe	Lys	Pro	Pro	Gln	Arg	Ile	Glu	Ala	Arg	Thr	His	Leu
		35					40					45			
Gln	Leu	Gly	Ser	Val	Leu	Tyr	His	His	Thr	Lys	Asn	Ser	Glu	Gln	Ala
		50				55					60				
Arg	Ser	His	Leu	Glu	Lys	Ala	Trp	Leu	Ile	Ser	Gln	Gln	Ile	Pro	Gln
65					70				75				80		
Phe	Glu	Asp	Val	Lys	Phe	Glu	Ala	Ala	Ser	Leu	Leu	Ser	Glu	Leu	Tyr
				85				90					95		
Cys	Gln	Glu	Asn	Ser	Val	Asp	Ala	Ala	Lys	Pro	Leu	Leu	Arg	Lys	Ala
			100					105					110		
Ile	Gln	Ile	Ser	Gln	Gln	Thr	Pro	Tyr	Trp	His	Cys	Arg	Leu	Leu	Phe

115 120 125
 Gln Leu Ala Gln Leu His Thr Leu Glu Lys Asp Leu Val Ser Ala Cys
 130 135 140
 Asp Leu Leu Gly Val Gly Ala Glu Tyr Ala Arg Val Val Gly Ser Glu
 145 150 155 160
 Tyr Thr Arg Ala Leu Phe Leu Leu Ser Lys Gly Met Leu Leu Leu Met
 165 170 175
 Glu Arg Lys Leu Gln Glu Val His Pro Leu Leu Thr Leu Cys Gly Gln
 180 185 190
 Ile Val Glu Asn Trp Gln Gly Asn Pro Ile Gln Lys Glu Ser Leu Arg
 195 200 205
 Val Phe Phe Leu Val Leu Gln Val Thr His Tyr Leu Asp Ala Gly Gln
 210 215 220
 Val Lys Ser Val Lys Pro Cys Leu Lys Gln Leu Gln Gln Cys Ile Gln
 225 230 235 240
 Thr Ile Ser Thr Leu His Asp Asp Glu Ile Leu Pro Ser Asn Pro Ala
 245 250 255
 Asp Leu Phe His Trp Leu Pro Lys Glu His Met Cys Val Leu Val Tyr
 260 265 270
 Leu Val Thr Val Met His Ser Met Gln Ala Gly Tyr Leu Glu Lys Ala
 275 280 285
 Gln Lys Tyr Thr Asp Lys Ala Leu Met Gln Leu Glu Lys Leu Lys Met
 290 295 300
 Leu Asp Cys Ser Pro Ile Leu Ser Ser Phe Gln Val Ile Leu Leu Glu
 305 310 315 320
 His Ile Ile Met Cys Arg Leu Val Thr Gly His Lys Ala Thr Ala Leu
 325 330 335
 Gln Glu Ile

<210> 5627
 <211> 1401
 <212> DNA
 <213> Homo sapiens

<400> 5627
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 120
 aagagccagg gttatgtgca catgggaggt ggggaggaca ggggctgtat gtgacctca
 180
 catctgttcc tcgcgcccc gatggcttct gctgcctgct ccatggaccc catcgacagc
 240
 tttgagctcc tggatctcct gtttgaccgg caggacggca tcctgagaca cgtggagctg
 300
 ggcgaggggt ggggtcacgt caaggaccag gtcctgccaa accccgactc tgacgacttc
 360
 ctgagctcca tcctgggctc tggagactca ctgcccagct cccactctg gtccccgaa
 420
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 480
 agcggaccag ccacctcccc cgccggtgc catcctgcc agcctggcaa ggggacctgc
 540

ctctcctatc atcctggcaa ctcttgctcc accacaaccc cagggccagt gatccaacaa
 600
 cagcatcacc tgggggcctc ctacctctg cgacctgggg ctgggcactg tcaggagctg
 660
 gtgctcaccg aggatgagaa gaagctgctg gctaaagaag gcatcaccct gccactcag
 720
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 780
 aagcagtcgg cgcaagaaag caggaagaag aagaaggaat atatcgatgg cctggagact
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 1380
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 1401

<210> 5628

<211> 299

<212> PRT

<213> Homo sapiens

<400> 5628

Met	Ala	Ser	Ala	Ala	Cys	Ser	Met	Asp	Pro	Ile	Asp	Ser	Phe	Glu	Leu
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Leu	Asp	Leu	Leu	Phe	Asp	Arg	Gln	Asp	Gly	Ile	Leu	Arg	His	Val	Glu
		20						25					30		
Leu	Gly	Glu	Gly	Trp	Gly	His	Val	Lys	Asp	Gln	Val	Leu	Pro	Asn	Pro
	35					40					45				
Asp	Ser	Asp	Asp	Phe	Leu	Ser	Ser	Ile	Leu	Gly	Ser	Gly	Asp	Ser	Leu
	50				55					60					
Pro	Ser	Ser	Pro	Leu	Trp	Ser	Pro	Glu	Gly	Ser	Asp	Ser	Gly	Ile	Ser
65				70				75					80		
Glu	Asp	Leu	Pro	Ser	Asp	Pro	Gln	Asp	Thr	Pro	Pro	Arg	Ser	Gly	Pro
			85					90					95		
Ala	Thr	Ser	Pro	Ala	Gly	Cys	His	Pro	Ala	Gln	Pro	Gly	Lys	Gly	Pro
		100						105					110		
Cys	Leu	Ser	Tyr	His	Pro	Gly	Asn	Ser	Cys	Ser	Thr	Thr	Thr	Pro	Gly
	115					120					125				
Pro	Val	Ile	Gln	Gln	Gln	His	His	Leu	Gly	Ala	Ser	Tyr	Leu	Leu	Arg

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      130              135              140
Pro Gly Ala Gly His Cys Gln Glu Leu Val Leu Thr Glu Asp Glu Lys
145              150              155              160
Lys Leu Leu Ala Lys Glu Gly Ile Thr Leu Pro Thr Gln Leu Pro Leu
      165              170              175
Thr Lys Tyr Glu Glu Arg Val Leu Lys Lys Ile Arg Arg Lys Ile Arg
      180              185              190
Asn Lys Gln Ser Ala Gln Glu Ser Arg Lys Lys Lys Lys Glu Tyr Ile
      195              200              205
Asp Gly Leu Glu Thr Arg Ser Cys Cys Cys Pro Leu Pro Ser Ser Ser
      210              215              220
Ser Pro Pro Ser Ala Leu Leu Ala Pro Thr Lys Pro Arg Ala Leu Gly
225              230              235              240
Thr Leu Arg Leu Tyr Glu Cys Ser Pro Glu Leu Cys Thr Thr Met Leu
      245              250              255
Pro Pro Ala Trp Leu Leu Met Leu Cys Gln Ala Pro Arg Pro Gln Asp
      260              265              270
Pro Asp Pro Arg Leu Thr Gln Pro Glu Lys Ser Leu Gln Glu Ala Pro
      275              280              285
Gly Gln Thr Gly Ala Ser Arg Thr Pro Arg Thr
      290              295

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<210> 5629

<211> 428

<212> DNA

<213> Homo sapiens

<400> 5629

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gtgcacgacc ccaactgaatc atcccacaac catggatggg agacacactc agtctccttt
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aacagaagat aaagctgggg cttacagaga atgtacaact tggcccaggg cacaccagtt
120
agccatcagg ggcagngctg ctattcaggt ctgggactgt gggactccag agcccatgtt
180
ttttacgagg atgccatact gccacaatgg atggtgtcctt tatctcctga tatatgattg
240
tgtgttggga ggcgtggggg ggcagctgga agaattggaga ggcataattg tggaggatct
300
tccccattc tctgtaccc tctcttgag ctcccagttc catctgagaa attatctact
360
ctgagaaatc gtcacaacac agcatggttg tgagtgcagt ggcagaagcc tgtgcttggt
420
tgtatggg
428

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<210> 5630

<211> 110

<212> PRT

<213> Homo sapiens

<400> 5630

```

Met Asp Gly Arg His Thr Gln Ser Pro Leu Thr Glu Asp Lys Ala Gly
1          5          10          15
Ala Tyr Arg Glu Cys Thr Thr Trp Pro Arg Ala His Gln Leu Ala Ile

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<210> 5631
<211> 783
<212> DNA
<213> Homo sapiens
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<210> 5632
<211> 183
<212> PRT
<213> Homo sapiens
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4812

1	5	10	15
Ala Gly Ala Gly Ala Gly His Leu Thr Pro Gln Ala Ser Pro Thr Ser			
	20	25	30
Glu Leu Pro Thr Ala Lys Thr Pro Gly Glu Ala Gly Arg Gly Gly Val			
	35	40	45
Arg Gly Lys Glu Gly Leu Cys Glu Ser Lys Pro His Pro Gln Ser Arg			
	50	55	60
Ala Glu Thr Gln Val Cys Lys Ser His Pro Pro Thr Ser Ser Ser			
65	70	75	80
Phe Glu Ala Ser Ser Thr Arg Gly Arg Ala Gly Ala Ala Gln Arg Pro			
	85	90	95
Glu Lys Gly Lys Pro His Arg Arg Lys Leu Lys Ala Ser Val Pro Cys			
	100	105	110
Val Ser Ala Glu Arg Val Asn Gly Pro Lys Gly Ser Ser Leu Gln Thr			
	115	120	125
Ala Arg Ile His Pro Thr Gly Gly His Arg Thr Arg Pro Gly Pro Ser			
	130	135	140
Ala Ser Val Pro Val Gln Pro Thr Pro Val Gln Pro Gly Ala Leu Ser			
145	150	155	160
Asp Leu Thr Thr Arg Val Pro Ser Thr Cys Val His Thr Gln Met Gln			
	165	170	175
Glu Arg Thr His Thr Thr Val			
	180		

<210> 5633

<211> 2181

<212> DNA

<213> Homo sapiens

<400> 5633

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 tgtcacctcc gtgtcccaca tagatgccag gctctgcttc tgtggttctg gaggtcatta
 120
 gtcaattgta tgtggtgctg tctgtcctcc tgattgcaga ggaggaagga accccttaaa
 180
 tgagcggggt ctgagtgtg gggccgtgg tctgctctgc ctggtgggat tctccagtgc
 240
 tggcttcac tggtccccag cccactctc accaacaagg agggcgtgaa aatgacaagg
 300
 aatccatccc tagagttcac aggagatcta gggcagagtt tccaagctgc agctgctctg
 360
 gccctgtgtg agctgtgtct ctgaggaagc cccaggctga ggtagctacc aggcggaggg
 420
 tgggtttgga ggcctccaca tcaggaatt gagcggtagg ggtttcagcc ttcacgttgg
 480
 tcgccgcact gtatgggaag tggggtctgg ggtctgcttg ccagttctca ccgtcctctt
 540
 cctccccaaa gccgcctgga taaggggctg gccgcactgg tgcgggagcg tggcgcggtat
 600
 ctggttgtca tcgagggcat gggccgtgct gtccacacaa actaccacgc agccctgcgc
 660
 tgcgagagcc tcaagctggc cgtcatcaag aacgcgtggc tggccgagcg gctgggaggc
 720

eggctcttca gcgccatctt caagtacgag gtcccagccg agtgaggcgc tgcagctgcc
780
ggactcttct gcttgtcact tgtccgagtg gcttcagaga ttaaaggggc cccctcataa
840
atgtgcctta attttcgcag ataacagggg gaatagacat ctttttggga gtcttccccct
900
ttgtcagggg gctactcctt agagggacag aggtcatcct ggctgcaac tcaggccccg
960
ccctgaacga cgtgaccac agcgagtccc tcatcgtggc agagcgtatt gcgggcatgg
1020
accctgaccg tgcgcagcct gctggacacc agggagcact gtctgaacga gttcaacttc
1080
ccggatccct actccaaagt gaagcagcgg gagaatggcg tggcgctgag gtgcttcccc
1140
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1260
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1320
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1380
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1440
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1500
gtgaccaca gcgagtcctt catcgtggca gagcgtattg cgggcatgga ccctgtcgtg
1560
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1620
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1680
ctgggtgtca tcgagggcat gggccgtgct gtccacacaa actaccacgc agccctgcgc
1740
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1800
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1860
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1920
caaatcaacg tatattatg gtactgctgt gacgcggcac atacaccoca gccgcacaga
1980
tgctgtgac ccagaggcga gacgcagctt tgcctggga gacgttcata ttggaatcta
2040
tttaactgct aaagaacctt ttatatatat atatatatat aaatagagag atctatacag
2100
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2160
aaaaaactct atttgggtgc t
2181

<210> 5634

<211> 289

<212> PRT

<213> Homo sapiens

<400> 5634

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Pro Thr Ala Ser Pro Ser Ser Trp Gln Ser Val Leu Arg Ala Trp Thr
 1             5             10             15
Leu Thr Val Arg Ser Leu Leu Asp Thr Arg Glu His Cys Leu Asn Glu
      20             25             30
Phe Asn Phe Pro Asp Pro Tyr Ser Lys Val Lys Gln Arg Glu Asn Gly
      35             40             45
Val Ala Leu Arg Cys Phe Pro Gly Val Val Arg Ser Leu Asp Ala Leu
      50             55             60
Gly Trp Glu Glu Arg Gln Leu Ala Leu Val Lys Gly Leu Leu Ala Gly
65             70             75             80
Asn Val Phe Asp Trp Gly Ala Lys Ala Val Ser Ala Val Leu Glu Ser
      85             90             95
Asp Pro Tyr Phe Gly Phe Glu Glu Ala Lys Arg Lys Leu Gln Glu Arg
      100            105            110
Pro Trp Leu Val Asp Ser Tyr Ser Glu Trp Leu Gln Arg Leu Lys Gly
      115            120            125
Pro Pro His Lys Cys Ala Leu Ile Phe Ala Asp Asn Ser Gly Ile Asp
      130            135            140
Ile Ile Leu Gly Val Phe Pro Phe Val Arg Glu Leu Leu Leu Arg Gly
145            150            155            160
Thr Glu Val Ile Leu Ala Cys Asn Ser Gly Pro Ala Leu Asn Asp Val
      165            170            175
Thr His Ser Glu Ser Leu Ile Val Ala Glu Arg Ile Ala Gly Met Asp
      180            185            190
Pro Val Val His Ser Ala Leu Gln Glu Glu Arg Leu Leu Leu Val Gln
      195            200            205
Thr Gly Ser Ser Ser Pro Cys Leu Asp Leu Ser Arg Leu Asp Lys Gly
      210            215            220
Leu Ala Ala Leu Val Arg Glu Arg Gly Ala Asp Leu Val Val Ile Glu
225            230            235            240
Gly Met Gly Arg Ala Val His Thr Asn Tyr His Ala Ala Leu Arg Cys
      245            250            255
Glu Ser Leu Lys Leu Ala Val Ile Lys Asn Ala Trp Leu Ala Glu Arg
      260            265            270
Leu Gly Gly Arg Leu Phe Ser Val Ile Phe Lys Tyr Glu Val Pro Ala
      275            280            285
Glu

```

<210> 5635

<211> 614

<212> DNA

<213> Homo sapiens

<400> 5635

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nntgtgaaag atgttgcaga agtgttccag aagtggctga agatagaagg aaaaaagtgc
60
cactgcctat cagaaaaaac aaaacaaaac atgggaaata caaccaccaa attccgtaaa
120
gcactcatca atggtgatga aaacctggcc tgccaaatat atgaaaacaa tcctcagcta
180

```

aaagaatctc ttgatccaaa tacatcttat ggggagccct accagcaca tactccatta
 240
 cattatgctg ctagacatgg aatgaataaa atattaggag atgatttcag aagagcagat
 300
 tgtctgcaga tgatcttaaa atggaaagga gcaaaacttg accaggggtga atatgagaga
 360
 gcagctattg atgctgttga taacaaaaaa aacacaccct tgcactatgc tgctgcctca
 420
 gggatgaaag cctgtgtaga aaaacatgga ggagacttgt ttgctgagaa tgaaaataaa
 480
 gatactcctt gtgattgtgc tgaaaagcaa caccacaaag atttggccct caatctggaa
 540
 tctcaaatgg tattctcacg ggatcccgag gctgaagaaa tagaagctga atatgctgca
 600
 ttagacaaac gaga
 614

<210> 5636

<211> 204

<212> PRT

<213> Homo sapiens

<400> 5636

Xaa	Val	Lys	Asp	Val	Ala	Glu	Val	Phe	Gln	Lys	Trp	Leu	Lys	Ile	Glu
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Gly	Lys	Lys	Cys	His	Cys	Leu	Ser	Glu	Lys	Thr	Lys	Gln	Asn	Met	Gly
			20					25					30		
Asn	Thr	Thr	Thr	Lys	Phe	Arg	Lys	Ala	Leu	Ile	Asn	Gly	Asp	Glu	Asn
			35				40					45			
Leu	Ala	Cys	Gln	Ile	Tyr	Glu	Asn	Asn	Pro	Gln	Leu	Lys	Glu	Ser	Leu
	50					55					60				
Asp	Pro	Asn	Thr	Ser	Tyr	Gly	Glu	Pro	Tyr	Gln	His	Asn	Thr	Pro	Leu
	65				70					75				80	
His	Tyr	Ala	Ala	Arg	His	Gly	Met	Asn	Lys	Ile	Leu	Gly	Asp	Asp	Phe
				85				90					95		
Arg	Arg	Ala	Asp	Cys	Leu	Gln	Met	Ile	Leu	Lys	Trp	Lys	Gly	Ala	Lys
		100					105						110		
Leu	Asp	Gln	Gly	Glu	Tyr	Glu	Arg	Ala	Ala	Ile	Asp	Ala	Val	Asp	Asn
	115					120					125				
Lys	Lys	Asn	Thr	Pro	Leu	His	Tyr	Ala	Ala	Ala	Ser	Gly	Met	Lys	Ala
	130					135					140				
Cys	Val	Glu	Lys	His	Gly	Gly	Asp	Leu	Phe	Ala	Glu	Asn	Glu	Asn	Lys
	145				150					155				160	
Asp	Thr	Pro	Cys	Asp	Cys	Ala	Glu	Lys	Gln	His	His	Lys	Asp	Leu	Ala
			165				170						175		
Leu	Asn	Leu	Glu	Ser	Gln	Met	Val	Phe	Ser	Arg	Asp	Pro	Glu	Ala	Glu
	180						185						190		
Glu	Ile	Glu	Ala	Glu	Tyr	Ala	Ala	Leu	Asp	Lys	Arg				
	195					200									

<210> 5637

<211> 825

<212> DNA

<213> Homo sapiens

<400> 5637

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 120
 ccagggtactc agggccctgc cctcgtggcc ttgtccgctc gccgcgggtg gggctggcac
 180
 aaggcccggtt ttggaggaag tggaggctcc caggagaaag gcagtggctg tgatcgaca
 240
 gcccaggctc tgccctgcac tgccctggac cacgaggctg cccaccccag acagggtggga
 300
 cccctttccc gcatgcagac tctgagcagc agcttcctgt gacccccacc gcgtcctgct
 360
 cctcaggctc atgcctgcg ggaacagaag ccaagaccg gtagaaaatc caagggtgtt
 420
 aaatataaat aagagcgatt cccacagccc cacggtgctg gccagcctca cagggtgccc
 480
 ctggttctgt gacccatccc aggcacagc tcccctggct gggcgcttg ccagggtctc
 540
 cctgtggctg gcgtgtggag acacgtgggc cttctccac gtgcccacga gggccgtagc
 600
 aggtccaag gaggcccagc cccggccagc ctgtgtggac cccgcgggc tgcgcgccc
 660
 ggagctgctg actgtgtcag agcccggctg cccagcgc cggcgccctc cctccagctg
 720
 cccagcctgg gatccgtccg ctgtctgtct cctgaaccag ggagtctgac cactcacag
 780
 ctcccatggg gtccgtgcag ccaaggcccc gcagccacac tcact
 825

<210> 5638

<211> 132

<212> PRT

<213> Homo sapiens

<400> 5638

Met	Pro	Cys	Gly	Asn	Arg	Ser	Gln	Asp	Pro	Val	Glu	Asn	Pro	Arg	Cys
1				5				10						15	
Leu	Asn	Ile	Asn	Lys	Ser	Asp	Ser	His	Ser	Pro	Thr	Val	Leu	Ala	Ser
			20					25					30		
Leu	Thr	Gly	Ala	Arg	Trp	Phe	Cys	Asp	Pro	Ser	Gln	Ala	His	Ala	Pro
		35					40					45			
Leu	Ala	Gly	Arg	Leu	Ala	Arg	Ala	Pro	Leu	Trp	Leu	Ala	Cys	Gly	Asp
		50				55					60				
Thr	Trp	Ala	Leu	Leu	His	Val	Pro	Thr	Arg	Ala	Val	Ala	Gly	Ser	Lys
		65			70				75					80	
Glu	Ala	Gln	Pro	Arg	Pro	Ala	Cys	Val	Asp	Pro	Ala	Gly	Leu	Arg	Ala
			85					90					95		
Pro	Glu	Leu	Leu	Thr	Val	Ser	Glu	Pro	Gly	Cys	Pro	Ala	Pro	Arg	Arg
		100						105					110		
Pro	Pro	Ser	Ser	Cys	Pro	Ala	Trp	Asp	Pro	Ser	Ala	Val	Cys	Leu	Leu
		115					120						125		
Asn	Gln	Gly	Val												

130

<210> 5639

<211> 2433

<212> DNA

<213> Homo sapiens

<400> 5639

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120
atttgacatt tcttcttcca catccagtggt atctgacatt tagcgacacat ttgatttgca
180
ctcaccact ttgaggagct caattgccgc ttaagtccgt ggctagtggc tgcctaaag
240
ttcagcaccg ccacggagct ttgggtccac ccggactgta aaaaggaagc acttccgtta
300
gcatgaccg gcctgaagta gcggcggaac ggaagtcgct tgtgtatgaa cgcagcggcg
360
gacctgtgag gggatccgac ttgccggcag aacttacgct gcgggacccc gggcactgtt
420
gctgctgcgg gagactgtgg gctgtttagt gccatgcacc ctttacagtg tgctctcaa
480
gtgcagaggt ctctgggggtg gggaccattg gcctctgtgt cttggctgtc gctgaggatg
540
tgcagggcac acagcagtct ctctagtacc atgtgtccca gtccagagag gcaggaggat
600
ggagctcgga aggatttcag ctccaggctg gctgctggac cgacttttca acatttttta
660
aaaagtgcct cagctcctca ggagaagctg tcttcagaag tggaagacc acctccctat
720
ctcatgatgg atgaacttct tggaaaggcag agaaaagtct acctcgagac ctatggctgc
780
cagatgaatg tgaatgacac agagatagcc tgggtccatct tacagaagag tggctacctg
840
cggccagtaa cctccaaggc agatgtgatt ctcttctgtca cgtgctctat cagggagaag
900
gctgagcaga ccatctggaa ccgtttacat cagcttaaag ccttgaagac aaggcggccc
960
cgctcccggg ttctcttgag gattggaatt ctaggctgca tggctgagag gttgaaggag
1020
gagatttca acagagagaa aatggtagat attttggtg gtcctgatgc ctaccgggac
1080
cttccccggc tgctggctgt tgctgagtcg ggccagcaag ctgccaacgt gctgctctct
1140
ctggacgaga cctatgctga tgtcatgcca gtccagacaa gcgccagtgc cacgtctgcc
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1260
cggggcaggg agaggagtcg gcctattgcc tccattctag aggaagtga gaagctttct
1320
gagcaggggc tgaaagaagt gacatttctt ggtcagaatg ttaatagttt tcgggacaat
1380

tcggagggtcc agttcaacag tgcagtgccct accaatctca gtcgtggctt taccaccaac
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 1500
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 1620
 ggaagcagcc gtgtgttgga ggccatgcgg aggggatatt caagagaagc ttatgtggag
 1680
 ttagttcacc atattagaga atctattcca ggtgtgagcc tcagcagcga tttcattgct
 1740
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 1800
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 1860
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 1920
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 1980
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 2040
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 2160
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 2220
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 2280
 tgccactgag gaaacaggtc atgaagggtg agataagctg caaggggcca agcaacttta
 2340
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 2400
 ttacctaata ctaagggtta aaaaaaaaaa aaa
 2433

<210> 5640

<211> 540

<212> PRT

<213> Homo sapiens

<400> 5640

Met	Cys	Pro	Ser	Pro	Glu	Arg	Gln	Glu	Asp	Gly	Ala	Arg	Lys	Asp	Phe
1				5				10					15		
Ser	Ser	Arg	Leu	Ala	Ala	Gly	Pro	Thr	Phe	Gln	His	Phe	Leu	Lys	Ser
		20					25					30			
Ala	Ser	Ala	Pro	Gln	Glu	Lys	Leu	Ser	Ser	Glu	Val	Glu	Asp	Pro	Pro
		35					40					45			
Pro	Tyr	Leu	Met	Met	Asp	Glu	Leu	Leu	Gly	Arg	Gln	Arg	Lys	Val	Tyr
	50					55				60					
Leu	Glu	Thr	Tyr	Gly	Cys	Gln	Met	Asn	Val	Asn	Asp	Thr	Glu	Ile	Ala
65					70					75				80	
Trp	Ser	Ile	Leu	Gln	Lys	Ser	Gly	Tyr	Leu	Arg	Pro	Val	Thr	Ser	Lys

4820

```

1515
Arg His Leu Gly Asp Met Phe Ser Ala Gly Pro Leu
530 535 540 525

<210> 5641
<211> 293
<212> DNA
<213> Homo sapiens

<400> 5641
cgcgtgcata cagccaacct gtgcgtgctg ctgtaccgca gcggcgctcaa agtggtcacc
60
ttctgtggcc acgcgtccaa aaccaatcag gtcaactcgg gcggtgtgct gctgagggttg
120
cagggtgggcg aggagggtgtg gctgggctggg gcacccctgg catccctgga gagccagggtg
180
aggagggcag atacaagcag aaattccagt cagtgttcac ggtcactcgg cagaccacc
240
agccccctgc acccaacagc ctgatcagat tcaacgcggg cctcaccaac ccg
293

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<210> 5642
<211> 87
<212> PRT
<213> Homo sapiens
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```

<400> 5642
Ala Ser His Thr Ala Asn Leu Cys Val Leu Leu Tyr Arg Ser Gly Val
 1                    5                10                15
Lys Val Val Thr Phe Cys Gly His Ala Ser Lys Thr Asn Gln Val Asn
 20                25                30
Ser Gly Gly Val Leu Leu Arg Leu Gln Val Gly Glu Glu Val Trp Leu
 35                40                45
Ala Gly Ala Pro Leu Ala Ser Leu Glu Ser Gln Val Arg Arg Ala Asp
 50                55                60
Thr Ser Arg Asn Ser Ser Gln Cys Ser Arg Ser Leu Gly Arg Pro Thr
 65                70                75                80
Ser Pro Leu His Pro Thr Ala
 85

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<210> 5643
<211> 1218
<212> DNA
<213> Homo sapiens
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<400> 5643
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caaaataaca tggcagccag acgaattaca caggagactt ttgatgctgt attacaagaa
120
aaagccaaac gatatcacat ggatgccagt ggtgaggctg taagcgaaac tcttcagttt
180
aaagctcaag atctcttaag ggcagtccca agatccagag cagagatgta tgatgacgtc
240
```

cacagcgatg gcagatactc cctcagtggg tctgtagctc actctagaga tgccggaaga
 300
 gaaggcctga gaagtgcgt atttccaggg ccttccttca gatcaagcaa cccttccatc
 360
 agtgcagaca gctactttcg caaagaatgt ggccgggagc tggaattttc tcaactctgat
 420
 tctcgggacc aggtcattgg ccaccggaaa ttggggcatt tccgtttctca ggactggaaa
 480
 tttgcgctcc gtggttcttg ggaacaagac tttggccatc cagttttctca agagtcctct
 540
 tggtcacagg agtatagttt tggtcctctc gcagtttttg gggacttttg atcttccagg
 600
 ctgattgaga aagagtgttt ggagaaggag agtcgggatt atgacgtgga ccatcctggg
 660
 gaggctgact ctgtgcttag gggcagcagt caagtccagg ccagagggtcg agctctaaac
 720
 atcgttgacc aggaaggttc cctcctagga aagggggaga ctcagggcct gctcacagct
 780
 aaggggggtg ttgggaaact tgtcacattg agaaatgtga gcacaaaaaa aatacccacc
 840
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<210> 5644

<211> 202

<212> PRT

<213> Homo sapiens

<400> 5644

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			20					25					30		
Ser	Arg	Leu	Ile	Glu	Lys	Glu	Cys	Leu	Glu	Lys	Glu	Ser	Arg	Asp	Tyr
	35					40					45				
Asp	Val	Asp	His	Pro	Gly	Glu	Ala	Asp	Ser	Val	Leu	Arg	Gly	Ser	Ser
	50					55					60				
Gln	Val	Gln	Ala	Arg	Gly	Arg	Ala	Leu	Asn	Ile	Val	Asp	Gln	Glu	Gly
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Ser	Leu	Leu	Gly	Lys	Gly	Glu	Thr	Gln	Gly	Leu	Leu	Thr	Ala	Lys	Gly
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Gln Lys Asn Thr Pro Ser Pro Asp Val Thr Leu Gly Thr Asn Pro Gly
          130          135          140
Thr Glu Asp Ile Gln Phe Pro Ile Gln Lys Ile Pro Leu Gly Leu Asp
145          150          155          160
Leu Lys Asn Leu Arg Leu Pro Arg Arg Lys Met Ser Phe Asp Ile Ile
          165          170          175
Asp Lys Ser Asp Val Phe Ser Arg Phe Gly Ile Glu Ile Ile Lys Trp
          180          185          190
Ala Gly Phe His Thr Ile Lys Leu Asp Tyr
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<210> 5645
 <211> 156
 <212> DNA
 <213> Homo sapiens

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<210> 5646
 <211> 52
 <212> PRT
 <213> Homo sapiens

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Thr Ser Thr Gly Lys Phe Thr Cys Lys Val Pro Gly Leu Tyr Tyr Phe
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Val Tyr His Ala
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<210> 5647
 <211> 150
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 <213> Homo sapiens

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<210> 5648
 <211> 50
 <212> PRT
 <213> Homo sapiens

<400> 5648
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 Gly Ile Arg Gly Pro Lys Gly Gln Lys Gly Glu Pro Gly Leu Pro Gly
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 His Pro
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<210> 5649
 <211> 345
 <212> DNA
 <213> Homo sapiens

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 240
 ccgtggggcc ctccgacttc gggccgcgca gtatcgaccc cacactcaca cgcctcttcg
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<210> 5650
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 <212> PRT
 <213> Homo sapiens

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 Ala Arg Ala Ala Cys Ser Ala Arg Arg Ser Ser Thr Ala Val Thr Ser
 35 40 45
 Trp Cys Arg Arg Arg Thr Ala Thr Arg Cys Pro Gly Gly Ala Thr Arg
 50 55 60
 Arg Val Arg Gly Ala Leu Arg Leu Arg Ala Ala Gln Tyr Arg Pro His
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 Thr His Thr Pro Leu Arg Val Leu Glu Pro Gly Leu Gln Trp Gln Ala
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 Gly Val Ser Gln

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<210> 5651
 <211> 615
 <212> DNA
 <213> Homo sapiens

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 480
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 <211> 163
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Thr Leu Leu Leu Glu Ser Gly Ile Gln Ile His Thr Thr Glu Phe Glu
 50 55 60
 Trp Pro Lys Asn Met Met Pro Ser Ser Phe Ala Met Lys Cys Arg Lys
 65 70 75 80
 His Leu Lys Ser Arg Arg Leu Val Ser Ala Lys Gln Leu Gly Val Asp
 85 90 95
 Arg Ile Val Asp Phe Gln Phe Gly Ser Asp Glu Ala Ala Tyr His Leu
 100 105 110
 Ile Ile Glu Leu Tyr Asp Arg Gly Asn Ile Val Leu Thr Asp Tyr Glu
 115 120 125
 Tyr Val Ile Leu Asn Ile Leu Arg Phe Arg Thr Asp Glu Ala Asp Asp

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Ala Glu Pro		160

<210> 5653
 <211> 1439
 <212> DNA
 <213> Homo sapiens

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<210> 5654

<211> 245

<212> PRT

<213> Homo sapiens

<400> 5654

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			20					25					30		
Tyr	Gly	Ile	Pro	Gly	Met	Pro	Gly	Leu	Pro	Gly	Ala	Pro	Gly	Lys	Asp
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Gly	Tyr	Asp	Gly	Leu	Pro	Gly	Pro	Lys	Gly	Glu	Pro	Gly	Ile	Pro	Ala
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Ile	Pro	Gly	Ile	Arg	Gly	Pro	Lys	Gly	Gln	Lys	Gly	Glu	Pro	Gly	Leu
65					70					75					80
Pro	Gly	His	Pro	Gly	Lys	Asn	Gly	Pro	Met	Gly	Pro	Pro	Gly	Met	Pro
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Gly	Val	Pro	Gly	Pro	Met	Gly	Ile	Pro	Gly	Glu	Pro	Gly	Glu	Glu	Gly
			100					105					110		
Arg	Tyr	Lys	Gln	Lys	Phe	Gln	Ser	Val	Phe	Thr	Val	Thr	Arg	Gln	Thr
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His	Gln	Pro	Pro	Ala	Pro	Asn	Ser	Leu	Ile	Arg	Phe	Asn	Ala	Val	Leu
	130					135					140				
Thr	Asn	Pro	Gln	Gly	Asp	Tyr	Asp	Thr	Ser	Thr	Gly	Lys	Phe	Thr	Cys
145					150					155					160
Lys	Val	Pro	Gly	Leu	Tyr	Tyr	Phe	Val	Tyr	His	Ala	Ser	His	Thr	Ala
				165					170					175	
Asn	Leu	Cys	Val	Leu	Leu	Tyr	Arg	Ser	Gly	Val	Lys	Val	Val	Thr	Phe
			180				185					190			
Cys	Gly	His	Thr	Ser	Lys	Thr	Asn	Gln	Val	Asn	Ser	Gly	Gly	Val	Leu
		195					200					205			
Leu	Arg	Leu	Gln	Val	Gly	Glu	Glu	Val	Trp	Leu	Ala	Val	Asn	Asp	Tyr
	210					215					220				
Tyr	Asp	Met	Val	Gly	Ile	Gln	Gly	Ser	Asp	Ser	Val	Phe	Ser	Gly	Phe
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Leu	Leu	Phe	Pro	Asp											
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<210> 5655

<211> 3810

<212> DNA

<213> Homo sapiens

<400> 5655

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<210> 5656

<211> 987

<212> PRT

<213> Homo sapiens

<400> 5656

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			20					25					30		
Ala	Glu	Val	Arg	Arg	Glu	Trp	Ala	Lys	Tyr	Met	Glu	Val	His	Glu	Lys
		35					40					45			
Ala	Ser	Phe	Thr	Asn	Ser	Glu	Leu	His	Arg	Ala	Met	Asn	Leu	His	Val
		50				55				60					
Gly	Asn	Leu	Arg	Leu	Leu	Ser	Gly	Pro	Leu	Asp	Gln	Val	Arg	Ala	Ala
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Leu	Pro	Thr	Pro	Ala	Leu	Ser	Pro	Glu	Asp	Lys	Ala	Val	Leu	Gln	Asn
			85					90					95		
Leu	Lys	Arg	Ile	Leu	Ala	Lys	Val	Gln	Glu	Met	Arg	Asp	Gln	Arg	Val
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Ser	Leu	Glu	Gln	Gln	Leu	Arg	Glu	Leu	Ile	Gln	Lys	Asp	Asp	Ile	Thr
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Ala	Ser	Leu	Val	Thr	Thr	Asp	His	Ser	Glu	Met	Lys	Lys	Leu	Phe	Glu
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Glu	Gln	Leu	Lys	Lys	Tyr	Asp	Gln	Leu	Lys	Val	Tyr	Leu	Glu	Gln	Asn
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Gln	Tyr	Ala	Ala	Val	Arg	Arg	Val	Leu	Ser	Asp	Leu	Asp	Gln	Lys	Trp
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Leu	Met	Lys	Lys	Ser	Gln	Glu	Gly	Arg	Asp	Phe	Tyr	Ala	Asp	Leu	Glu
		210				215					220				
Ser	Lys	Val	Ala	Ala	Leu	Leu	Glu	Arg	Thr	Gln	Ser	Thr	Cys	Gln	Ala

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		275					280					285			
Leu	Pro	Pro	Asp	Met	Val	Ala	Gly	Pro	Arg	Leu	Pro	Asp	Thr	Phe	Leu
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Tyr	Ser	Gly	Pro	Thr	Gln	Leu	Ile	Gln	Pro	Arg	Ala	Pro	Gly	Pro	His
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Leu	Pro	Ser	Ala	Pro	Pro	Gln	Phe	Ser	Gly	Pro	Glu	Leu	Ala	Met	
			405					410					415		
Ala	Val	Arg	Pro	Ala	Thr	Thr	Thr	Val	Asp	Ser	Ile	Gln	Ala	Pro	Ile
			420					425					430		
Pro	Ser	His	Thr	Ala	Pro	Arg	Pro	Asn	Pro	Thr	Pro	Ala	Pro	Pro	Pro
		435					440					445			
Pro	Cys	Phe	Pro	Val	Pro	Pro	Pro	Gln	Pro	Leu	Pro	Thr	Pro	Tyr	Thr
	450					455					460				
Tyr	Pro	Ala	Gly	Ala	Lys	Gln	Pro	Ile	Pro	Ala	Gln	His	His	Phe	Ser
465					470					475					480
Ser	Gly	Ile	Pro	Thr	Gly	Phe	Pro	Ala	Pro	Arg	Ile	Gly	Pro	Gln	Pro
			485					490						495	
Gln	Pro	His	Pro	Gln	Pro	His	Pro	Ser	Gln	Ala	Phe	Gly	Pro	Gln	Pro
		500						505					510		
Pro	Gln	Gln	Pro	Leu	Pro	Leu	Gln	His	Pro	His	Leu	Phe	Pro	Pro	Gln
		515					520					525			
Ala	Pro	Gly	Leu	Leu	Pro	Pro	Gln	Ser	Pro	Tyr	Pro	Tyr	Ala	Pro	Gln
	530					535					540				
Pro	Gly	Val	Leu	Gly	Gln	Pro	Pro	Pro	Pro	Leu	His	Thr	Gln	Leu	Tyr
545					550					555					560
Pro	Gly	Pro	Ala	Gln	Asp	Pro	Leu	Pro	Ala	His	Ser	Gly	Ala	Leu	Pro
			565					570						575	
Phe	Pro	Ser	Pro	Gly	Pro	Pro	Gln	Pro	His	Pro	Pro	Leu	Ala	Tyr	
			580					585					590		
Gly	Pro	Ala	Pro	Ser	Thr	Arg	Pro	Met	Gly	Pro	Gln	Ala	Ala	Pro	Leu
		595					600					605			
Thr	Ile	Arg	Gly	Pro	Ser	Ser	Ala	Gly	Gln	Ser	Thr	Pro	Ser	Pro	His
	610					615					620				
Leu	Val	Pro	Ser	Pro	Ala	Pro	Ser	Pro	Gly	Pro	Gly	Pro	Val	Pro	Pro
625					630					635					640
Arg	Pro	Pro	Ala	Ala	Glu	Pro	Pro	Pro	Cys	Leu	Arg	Arg	Gly	Ala	Ala
			645					650						655	
Ala	Ala	Asp	Leu	Leu	Ser	Ser	Ser	Pro	Glu	Ser	Gln	His	Gly	Gly	Thr

660 665 670
 Gln Ser Pro Gly Gly Gly Gln Pro Leu Leu Gln Pro Thr Lys Val Asp
 675 680 685
 Ala Ala Glu Gly Arg Arg Pro Gln Ala Leu Arg Leu Ile Glu Arg Asp
 690 695 700
 Pro Tyr Glu His Pro Glu Arg Leu Arg Gln Leu Gln Gln Glu Leu Glu
 705 710 715 720
 Ala Phe Arg Gly Gln Leu Gly Asp Val Gly Ala Leu Asp Thr Val Trp
 725 730 735
 Arg Glu Leu Gln Asp Ala Gln Glu His Asp Ala Arg Gly Arg Ser Ile
 740 745 750
 Ala Ile Ala Arg Cys Tyr Ser Leu Lys Asn Arg His Gln Asp Val Met
 755 760 765
 Pro Tyr Asp Ser Asn Arg Val Val Leu Arg Ser Gly Lys Asp Asp Tyr
 770 775 780
 Ile Asn Ala Ser Cys Val Glu Gly Leu Ser Pro Tyr Cys Pro Pro Leu
 785 790 795 800
 Val Ala Thr Gln Ala Pro Leu Pro Gly Thr Ala Ala Asp Phe Trp Leu
 805 810 815
 Met Val His Glu Gln Lys Val Ser Val Ile Val Met Leu Val Ser Glu
 820 825 830
 Ala Glu Met Glu Lys Gln Lys Val Ala Arg Tyr Phe Pro Thr Glu Arg
 835 840 845
 Gly Gln Pro Met Val His Gly Ala Leu Ser Leu Ala Leu Ser Ser Val
 850 855 860
 Arg Ser Thr Glu Thr His Val Glu Arg Val Leu Ser Leu Gln Phe Arg
 865 870 875 880
 Asp Gln Ser Leu Lys Arg Ser Leu Val His Leu His Phe Pro Thr Trp
 885 890 895
 Pro Glu Leu Gly Leu Pro Asp Ser Pro Ser Asn Leu Leu Arg Phe Ile
 900 905 910
 Gln Glu Val His Ala His Tyr Leu His Gln Arg Pro Leu His Thr Pro
 915 920 925
 Ile Ile Val His Cys Ser Ser Gly Val Gly Arg Thr Gly Ala Phe Ala
 930 935 940
 Leu Leu Tyr Ala Ala Val Gln Glu Val Glu Ala Gly Asn Gly Ile Pro
 945 950 955 960
 Glu Leu Pro Gln Leu Val Arg Arg Met Arg Gln Gln Arg Lys His Met
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<210> 5657

<211> 1020

<212> DNA

<213> Homo sapiens

<400> 5657

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 120

gcctcgggct atgggaccca gaacattcga ctgagccggg atgccgtgaa ggacttcgac
 180

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 420
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 480
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 540
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 600
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 780
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 900
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 1020

<210> 5658

<211> 301

<212> PRT

<213> Homo sapiens

<400> 5658

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 Ile Arg Leu Ser Arg Asp Ala Val Lys Asp Phe Asp Cys Cys Leu
 35 40 45
 Ser Leu Gln Pro Cys His Asp Pro Val Val Thr Pro Asp Gly Tyr Leu
 50 55 60
 Tyr Glu Arg Glu Ala Ile Leu Glu Tyr Ile Leu His Gln Lys Lys Glu
 65 70 75 80
 Ile Ala Arg Gln Met Lys Ala Tyr Glu Lys Gln Arg Gly Thr Arg Arg
 85 90 95
 Glu Glu Gln Lys Glu Leu Gln Arg Ala Ala Ser Gln Asp His Val Arg
 100 105 110
 Gly Phe Leu Glu Lys Glu Ser Ala Ile Val Ser Arg Pro Leu Asn Pro
 115 120 125
 Phe Thr Ala Lys Ala Leu Ser Gly Thr Ser Pro Asp Val Gln Pro
 130 135 140
 Gly Pro Ser Val Gly Pro Pro Ser Lys Asp Lys Asp Lys Val Leu Pro

145				150				155				160			
Ser	Phe	Trp	Ile	Pro	Ser	Leu	Thr	Pro	Glu	Ala	Lys	Ala	Thr	Lys	Leu
				165				170						175	
Glu	Lys	Pro	Ser	Arg	Thr	Val	Thr	Cys	Pro	Met	Ser	Gly	Lys	Pro	Leu
			180					185					190		
Arg	Met	Ser	Asp	Leu	Thr	Pro	Val	His	Phe	Thr	Pro	Leu	Asp	Ser	Ser
		195				200					205				
Val	Asp	Arg	Val	Gly	Leu	Ile	Thr	Arg	Ser	Glu	Arg	Tyr	Val	Cys	Ala
	210					215					220				
Val	Thr	Arg	Asp	Ser	Leu	Ser	Asn	Ala	Thr	Pro	Cys	Ala	Val	Leu	Arg
225					230					235				240	
Pro	Ser	Gly	Ala	Val	Val	Thr	Leu	Glu	Cys	Val	Glu	Lys	Leu	Ile	Arg
			245					250						255	
Lys	Asp	Met	Val	Asp	Pro	Val	Thr	Gly	Asp	Lys	Leu	Thr	Asp	Arg	Asp
			260					265					270		
Ile	Ile	Val	Leu	Gln	Arg	Gly	Gly	Thr	Gly	Phe	Ala	Gly	Ser	Gly	Val
		275				280						285			
Lys	Leu	Gln	Ala	Glu	Lys	Ser	Arg	Pro	Val	Met	Gln	Ala			
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<210> 5659

<211> 1263

<212> DNA

<213> Homo sapiens

<400> 5659

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120
tcagagaagg cttagatcta tgcattgggt gttattctca gatgcagaga tgtaaatgcc
180
atttttctct tctgttttca ggtcacatgt gccaatttaa cgaacggtgg aaagtcagaa
240
cttctgaaat caggaagcag caaatccaca cttaaagcaca tatggacaga aagcagcaaa
300
gacttgctta tcagccgact cctgtcacag acttttcgtg gcaaagagaa tgatacagat
360
ttggacctga gatatgacac ccagaaacct tattctgagc aagacctctg ggactggctg
420
aggaactcca cagaccttca agagcctcgg ccagggcca agagaaggcc cattgttaaa
480
acgggcaagt ttaagaaaat gtttggtatg ggcgattttc attccaacat caaaacagt
540
aagctgaacc tgttgataac tgggaaaatt gtagatcatg gcaatgggac atttagtgtt
600
tatttcaggc ataattcaac tgggtcaagg aatgtatctg tcagcttggt acccctaca
660
aaaatcgtgg aatttgactt ggcacaacaa accgtgattg atgccaaaga ttccaagtct
720
tttaattgtc gcattgaata tgaaaagggt gacaaggcta ccaagaacac actctgcaac
780
tatgaccctt caaaaacctg ttaccaggag caaacccaaa gtcattgtatc ctggctctgc
840

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 960
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 1020
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 1080
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 1140
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 1260
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 1263

<210> 5660

<211> 253

<212> PRT

<213> Homo sapiens

<400> 5660

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			20					25					30		
Lys	Asp	Leu	Ser	Ile	Ser	Arg	Leu	Leu	Ser	Gln	Thr	Phe	Arg	Gly	Lys
	35						40					45			
Glu	Asn	Asp	Thr	Asp	Leu	Asp	Leu	Arg	Tyr	Asp	Thr	Pro	Glu	Pro	Tyr
	50					55					60				
Ser	Glu	Gln	Asp	Leu	Trp	Asp	Trp	Leu	Arg	Asn	Ser	Thr	Asp	Leu	Gln
65				70					75					80	
Glu	Pro	Arg	Pro	Arg	Ala	Lys	Arg	Arg	Pro	Ile	Val	Lys	Thr	Gly	Lys
				85					90					95	
Phe	Lys	Lys	Met	Phe	Gly	Trp	Gly	Asp	Phe	His	Ser	Asn	Ile	Lys	Thr
			100				105						110		
Val	Lys	Leu	Asn	Leu	Leu	Ile	Thr	Gly	Lys	Ile	Val	Asp	His	Gly	Asn
	115						120					125			
Gly	Thr	Phe	Ser	Val	Tyr	Phe	Arg	His	Asn	Ser	Thr	Gly	Gln	Gly	Asn
	130						135				140				
Val	Ser	Val	Ser	Leu	Val	Pro	Pro	Thr	Lys	Ile	Val	Glu	Phe	Asp	Leu
145				150						155				160	
Ala	Gln	Gln	Thr	Val	Ile	Asp	Ala	Lys	Asp	Ser	Lys	Ser	Phe	Asn	Cys
				165					170					175	
Arg	Ile	Glu	Tyr	Glu	Lys	Val	Asp	Lys	Ala	Thr	Lys	Asn	Thr	Leu	Cys
	180						185						190		
Asn	Tyr	Asp	Pro	Ser	Lys	Thr	Cys	Tyr	Gln	Glu	Gln	Thr	Gln	Ser	His
	195						200					205			
Val	Ser	Trp	Leu	Cys	Ser	Lys	Pro	Phe	Lys	Val	Ile	Cys	Ile	Tyr	Ile
	210					215					220				
Ser	Phe	Tyr	Ser	Thr	Asp	Tyr	Lys	Leu	Val	Gln	Lys	Val	Cys	Pro	Asp
225					230					235				240	
Tyr	Asn	Tyr	His	Ser	Asp	Thr	Pro	Tyr	Phe	Pro	Ser	Gly			

245

250

<210> 5661
 <211> 578
 <212> DNA
 <213> Homo sapiens

<400> 5661
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 120
 ataaccagtg gcacggcaag gaccagcag gaagcaccag ccactggccc cgacctcccg
 180
 caccaggac ctgacgggca cttagacaca cacagtggcc tgagctccaa ctccagcatg
 240
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 300
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 360
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 420
 ccagaaccag acccgagatg tccacgtcaa agtgacatgc tctgagaggc agcacacaca
 480
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 540
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 578

<210> 5662
 <211> 148
 <212> PRT
 <213> Homo sapiens

<400> 5662
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 20 25 30
 Gly Pro Ile Thr Gln Cys Thr Ala Arg Thr Gln Gln Glu Ala Pro Ala
 35 40 45
 Thr Gly Pro Asp Leu Pro His Pro Gly Pro Asp Gly His Leu Asp Thr
 50 55 60
 His Ser Gly Leu Ser Ser Asn Ser Ser Met Thr Thr Arg Glu Leu Gln
 65 70 75 80
 Gln Tyr Trp Gln Asn Gln Lys Cys Arg Trp Lys His Val Lys Leu Leu
 85 90 95
 Phe Glu Ile Ala Ser Ala Arg Ile Glu Glu Arg Lys Val Ser Lys Phe
 100 105 110
 Val Met Gly Lys Ser Arg Pro Gly Glu Met Thr Tyr Pro Gly Ser Arg
 115 120 125
 Gly Glu Thr Gly Thr Ala Pro Glu Pro Asp Pro Arg Cys Pro Arg Gln
 130 135 140
 Ser Asp Met Leu

145

<210> 5663

<211> 857

<212> DNA

<213> Homo sapiens

<400> 5663

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120
agacaggagg ctgccgtggt caagaagggc caagccttga agtctcacgg caccctctgt
180
gggtggaggta taaggctcag gggccaacta ctgggtcttg cagtcccat cgttgctgtg
240
ggctgtcttc accttcttta gttccttctg tagctcagac tcggccacca caacctcctt
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tggtcttctgg taagagatga tcagggtgca gttggcgtgg gcaaagctca gcaaggcgtc
360
atccagagggt agctggtgtc tatctagatc aggaatggag aacttcttgt agtacttctt
420
gttggttggt ctgacaatga tgcagcgtc cttctggtcc acagagacac tatagacatc
480
cttaggatag gggagggttc gaatccgcc ctggaaactc atcttggtgt ccttgcgcat
540
gaagatagga ttggcattgc tttccttgat gatttcaggc cccagggttc ctgctcctag
600
gggcgtggtg tctcctactt caagctgcc ctggcccatg gctcccaggg cacttttcac
660
acgccacttt ctacaagta gttcactcgt cttctcgtca tattcttcag ccatttcctt
720
gccgtctggg aataaatagt gaaccttctt tctcccgctc tgcagcagcg cagtctctg
780
ggctgtccgc agactctcca accagcccggt caccgccatc tttccctgc taagcagcac
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gccagccgc tgccatg
857

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<210> 5664

<211> 203

<212> PRT

<213> Homo sapiens

<400> 5664

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Met Ala Val Thr Gly Trp Leu Glu Ser Leu Arg Thr Ala Gln Lys Thr
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20           25           30
Gly Lys Glu Met Ala Glu Glu Tyr Asp Glu Lys Thr Ser Glu Leu Leu
35           40           45
Val Arg Lys Trp Arg Val Lys Ser Ala Leu Gly Ala Met Gly Gln Trp
50           55           60
Gln Leu Glu Val Gly Asp Pro Ala Pro Leu Gly Ala Gly Asn Leu Gly

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<210> 5665
<211> 531
<212> DNA
<213> Homo sapiens
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<210> 5666
<211> 79
<212> PRT
<213> Homo sapiens
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4838

35 40 45
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 65 70 75

<210> 5667
 <211> 858
 <212> DNA
 <213> Homo sapiens

<400> 5667
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 120
 tttgagaagt taagaatgat ttccaaggaa atccgccaag ttgttcgaat gacttctgct
 180
 aacatggacc cagctatgat gtttcgacag aggtcactga gtcaaggaag cacaaattca
 240
 aacatgctgg atgttcaggg aggtgctcac aaaaaaaggg cacgccgcag ctctctgctt
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 aatgccaaga agctatatga ggatgcccga atggcaagga aggtgaagca gtatctttcc
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 420
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 480
 aaaaacttat ttctctagaa ttatacctaa gtcccaagaa aattaacttt cactcacaaa
 540
 agattgctgg cataccttaa gcatcatgtg atccaattaa tcacagactg aatcccatcc
 600
 attcctgatg gctacactat ccaaaaaata gagggataag tagatcttta aaaagctttt
 660
 taattctttt aaaaactgga tcattataga ggaggctttc tgtttgagaa catttttata
 720
 ttcaccccta aagagtaaac ataagtggaa tttttacctc tttttatttc atggataata
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 840
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 858

<210> 5668
 <211> 152
 <212> PRT
 <213> Homo sapiens

<400> 5668
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 Phe Pro Val Val Lys Lys Asp Met Thr Phe Leu His Glu Gly Asn Asp
 20 25 30
 Ser Lys Val Asp Gly Leu Val Asn Phe Glu Lys Leu Arg Met Ile Ser

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<210> 5669
<211> 1842
<212> DNA
<213> Homo sapiens
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<400> 5669
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gccatgatgc gcagctccat agagagggggc aaatgggtct tcttcagaa ctgccacctg
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240
cacagggact tccgcctctg gctcaccagc ctgcccagca acaagttccc agtgtccatc
300
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aagtccctata gtagccttgg tgaagacttc ctcaactcct gccacaaggt gatggagtcc
420
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480
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720
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840
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900
aaatcatctt ctgcaggcag ccaggggccgg gaggagatag tggaggacgt caccctaaac
960

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 1320
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 1380
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<210> 5670

<211> 591

<212> PRT

<213> Homo sapiens

<400> 5670

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			20					25					30		
Gln	Gly	Gln	Gly	Pro	Arg	Ala	Glu	Ala	Met	Met	Arg	Ser	Ser	Ile	Glu
		35					40					45			
Arg	Gly	Lys	Trp	Val	Phe	Phe	Gln	Asn	Cys	His	Leu	Ala	Pro	Ser	Trp
	50					55					60				
Met	Pro	Ala	Leu	Glu	Arg	Leu	Ile	Glu	His	Ile	Asn	Pro	Asp	Lys	Val
65					70					75				80	
His	Arg	Asp	Phe	Arg	Leu	Trp	Leu	Thr	Ser	Leu	Pro	Ser	Asn	Lys	Phe
			85					90					95		
Pro	Val	Ser	Ile	Leu	Gln	Asn	Gly	Ser	Lys	Met	Thr	Ile	Glu	Pro	Pro
			100				105						110		
Arg	Gly	Val	Arg	Ala	Asn	Leu	Leu	Lys	Ser	Tyr	Ser	Ser	Leu	Gly	Glu
		115				120							125		
Asp	Phe	Leu	Asn	Ser	Cys	His	Lys	Val	Met	Glu	Phe	Lys	Ser	Leu	Leu

```

      130              135              140
Leu Ser Leu Cys Leu Phe His Gly Asn Ala Leu Glu Arg Arg Lys Phe
145              150              155              160
Gly Pro Leu Gly Phe Asn Ile Pro Tyr Glu Phe Thr Asp Gly Asp Leu
      165              170              175
Arg Ile Cys Ile Ser Gln Leu Lys Met Phe Leu Asp Glu Tyr Asp Asp
      180              185              190
Ile Pro Tyr Lys Val Leu Lys Tyr Thr Ala Gly Glu Ile Asn Tyr Gly
      195              200              205
Gly Arg Val Thr Asp Asp Trp Asp Arg Arg Cys Ile Met Asn Ile Leu
      210              215              220
Glu Asp Phe Tyr Asn Pro Asp Val Leu Ser Pro Glu His Ser Tyr Ser
225              230              235              240
Ala Ser Gly Ile Tyr His Gln Ile Pro Pro Thr Tyr Asp Leu His Gly
      245              250              255
Tyr Leu Ser Tyr Ile Lys Ser Leu Pro Leu Asn Asp Met Pro Glu Ile
      260              265              270
Phe Gly Leu His Asp Asn Ala Asn Ile Thr Phe Ala Gln Asn Glu Thr
      275              280              285
Phe Ala Leu Leu Gly Thr Ile Ile Gln Leu Gln Pro Lys Ser Ser Ser
      290              295              300
Ala Gly Ser Gln Gly Arg Glu Glu Ile Val Glu Asp Val Thr Gln Asn
305              310              315              320
Ile Leu Leu Lys Val Pro Glu Pro Ile Asn Leu Gln Trp Val Met Ala
      325              330              335
Lys Tyr Pro Val Leu Tyr Glu Glu Ser Met Asn Thr Val Leu Val Gln
      340              345              350
Glu Val Ile Arg Tyr Asn Arg Leu Leu Gln Val Ile Thr Gln Thr Leu
      355              360              365
Gln Asp Leu Leu Lys Ala Leu Lys Gly Leu Val Val Met Ser Ser Gln
      370              375              380
Leu Glu Leu Met Ala Ala Ser Leu Tyr Asn Asn Thr Val Pro Glu Leu
385              390              395              400
Trp Ser Ala Lys Ala Tyr Pro Ser Leu Lys Pro Leu Ser Ser Trp Val
      405              410              415
Met Asp Leu Leu Gln Arg Leu Asp Phe Leu Gln Ala Trp Ile Gln Asp
      420              425              430
Gly Ile Pro Ala Val Phe Trp Ile Ser Gly Phe Phe Phe Pro Gln Ala
      435              440              445
Phe Leu Thr Gly Thr Leu Gln Asn Phe Ala Arg Lys Phe Val Ile Ser
      450              455              460
Ile Asp Thr Ile Ser Phe Asp Phe Lys Val Met Phe Glu Ala Pro Ser
465              470              475              480
Glu Leu Thr Gln Arg Pro Gln Val Gly Cys Tyr Ile His Gly Leu Phe
      485              490              495
Leu Glu Gly Ala Arg Trp Asp Pro Glu Ala Phe Gln Leu Ala Glu Ser
      500              505              510
Gln Pro Lys Glu Leu Tyr Thr Glu Met Ala Val Ile Trp Leu Leu Pro
      515              520              525
Thr Pro Asn Arg Lys Ala Gln Asp Gln Asp Phe Tyr Leu Cys Pro Ile
      530              535              540
Tyr Lys Thr Leu Thr Arg Ala Gly Thr Leu Ser Thr Thr Gly His Ser
545              550              555              560
Thr Asn Tyr Val Ile Ala Val Glu Ile Pro Thr His Gln Pro Gln Arg

```

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<210> 5672
<211> 220
<212> PRT
<213> Homo sapiens
```

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<400> 5672
Met Asn Val Gln Pro Cys Ser Arg Cys Gly Tyr Gly Val Tyr Pro Ala
 1              5              10              15
Glu Lys Ile Ser Cys Ile Asp Gln Ile Trp His Lys Ala Cys Phe His
 20              25              30
Cys Glu Val Cys Lys Met Met Leu Ser Val Asn Asn Phe Val Ser His
 35              40              45
Gln Lys Lys Pro Tyr Cys His Ala His Asn Pro Lys Asn Asn Thr Phe
 50              55              60
Thr Ser Val Tyr His Thr Pro Leu Asn Leu Asn Val Arg Thr Phe Pro
 65              70              75              80

```

Glu Ala Ile Ser Gly Ile His Asp Gln Glu Asp Gly Glu Gln Cys Lys
 85 90 95
 Ser Val Phe His Trp Asp Met Lys Ser Lys Asp Lys Glu Gly Ala Pro
 100 105 110
 Asn Arg Gln Pro Leu Ala Asn Glu Arg Ala Tyr Trp Thr Gly Tyr Gly
 115 120 125
 Glu Gly Asn Ala Trp Cys Pro Gly Ala Leu Pro Asp Pro Glu Ile Val
 130 135 140
 Arg Met Val Glu Ala Arg Lys Ser Leu Gly Glu Glu Tyr Thr Glu Asp
 145 150 155 160
 Tyr Glu Gln Pro Arg Gly Lys Gly Ser Phe Pro Ala Met Ile Thr Pro
 165 170 175
 Ala Tyr Gln Arg Ala Lys Lys Ala Asn Gln Leu Ala Ser Gln Val Glu
 180 185 190
 Tyr Lys Arg Gly His Asp Glu Arg Ile Ser Arg Phe Ser Thr Val Ala
 195 200 205
 Asp Thr Pro Glu Leu Leu Arg Ser Lys Ala Trp Gly
 210 215 220

<210> 5673

<211> 1279

<212> DNA

<213> Homo sapiens

<400> 5673

nttttttttt tttgaagcca gcatttcctt ttatttcttg atggaaacgg ggccttaaaa
 60
 gcagaaatca atatttttgt ttgaaagatg cagtcagtgt aatttcactt ttggctaaaa
 120
 ccgagacgat aaaagaacag ttgggtgttt ataggatgcc ctcaaagtga gctggctaag
 180
 tgagctgggc tctaacttca ctcaaaaatt tatagtacag ctaagaaggc cagtctgtcc
 240
 atgaaagggg gccgagacaa gacgagggcg gcctcttcca ggcctgtgcc aagtgtcctt
 300
 ggggtcccg ccatgggtccac acttctgcag catccgcaga acatgtggcc gggtcctgcc
 360
 cagcagcagg gacagccaag tgggaggcag gcatgggtgca cacctgggga ggcccctggt
 420
 gcagaagcag cccacacagta gcagcccat ccagaggaag accactccgg agggccacag
 480
 gcctctgcag ccctggcact gccgcccagc cctccatctc agcgggatgt gcagggtgag
 540
 acaggaatgc agggacgttc tgcccctagg tcagcctctt catccgcctg ttgtgcttgc
 600
 atgggtcaagg ttgccctgtc cacagctgct gcaacgccat ccagggttc gtcttgtctc
 660
 tccagctcac tctcgccctc cgggccagcc ccttcatcct cctcaggatc tgggttagtt
 720
 cctgggtatc tgccctcagaa agggctggca ggcttgtctg cagggtgcagt gctgtgccct
 780
 cctggtctcc tgcgggtggc tcacggtgca ggggtacggc catcagccca gatgtgcat
 840

gccagactga gcagctcttc tctgcgggg aagagggttct tgcgcttctg agcaccaatg
 900
 catcttctaa cagctccatc ttcttgctga actgcacttc taaaatgggg ataacctctg
 960
 gcatcttggc agatatcaaa cgataggcca tgtctggctt tccaataaac cgctggcgga
 1020
 tgctaatttc gtaagggtgag tggaccttga tgcgtccac gtcttctctt tcaaacctgt
 1080
 gcatgagcaa agaactggag tcatgtattt ccaaccaga cacaaggacg gtgagcctcc
 1140
 ctggtttaac gtgagactct gttctgtggg aaataacagc aggaattttt atcagtatcc
 1200
 cttctttccc aaagggttca caactggtca tggagacatc ttccctgggc tttgtttccg
 1260
 gtggtgtctt ccaaagctt
 1279

<210> 5674

<211> 81

<212> PRT

<213> Homo sapiens

<400> 5674

Leu	His	Ser	Gln	Ile	Tyr	Ser	Thr	Ala	Lys	Lys	Ala	Ser	Leu	Ser	Met
1			5						10				15		
Lys	Gly	Ser	Arg	Asp	Lys	Thr	Arg	Ala	Ala	Ser	Ser	Arg	Pro	Val	Pro
			20					25					30		
Ser	Val	Leu	Gly	Val	Pro	Pro	Trp	Ser	Thr	Leu	Leu	Gln	His	Pro	Gln
			35				40					45			
Asn	Met	Trp	Pro	Gly	Pro	Ala	Gln	Gln	Gln	Gly	Gln	Pro	Ser	Gly	Arg
	50					55					60				
Gln	Ala	Trp	Cys	Thr	Pro	Gly	Glu	Ala	Pro	Gly	Ala	Glu	Ala	Ala	Pro
65					70					75					80
Gln															

<210> 5675

<211> 1074

<212> DNA

<213> Homo sapiens

<400> 5675

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 60
 ccctgagctc ccaccgagg cttaggccca aggggcctct tccaggctga gggcctgctg
 120
 gggtggggcc aggggctgag gctgaaagca gcagcctgcc tagtgggtga cgccaggggc
 180
 cggtgtaaca tggcaccgag gttggggcca cagcaatgtg tgggacggtg ggggtgggctg
 240
 gggcccttgg ctccaagcat tagttctcca agctctggtc cgttctccta cctccttcaa
 300
 ggggcaccag ggctacaagg tggtagttga gtattggggc ccgactcctg gggcactgga
 360

gtggtctcta ggcccaggc cccaaggaga gggctgggtt tctgggagag tgctggtcct
 420
 tctctcttgg gcttggccat cttgacagct tcctcgtagg aggggtggagg ctccgggggtg
 480
 tacaggctgt aggcaggagg agccgtggag tccaggtcca gctcccaaa gggcaggggc
 540
 aaccgcatgc ccagtgggta ctgcacggag ctgtaggagg tcacagtgtc gtgtacaggg
 600
 ctgtcactgt ccatagggat gactgccacg tcgcagggtc gccgtgctgg tggcagatgt
 660
 ggctggggcct gtgcctgctt ccggaggcag cagaaccgga cacaaccagc tgtgacacca
 720
 cacagcagaa gcaggaggac cgccagcagg atgagcctag gagagcaagg ctctaccact
 780
 ggactgacct tcggccaccg ggcacctgca ccctggggaa tgtcgtggca caaccaccga
 840
 agacaggtta acaggataaa aagcagacaa tgtctctcca tgtcggagac cgccgtggcc
 900
 agagcctggc ctccggctgc tgggcctgcc ctggctatct ctctgggct ggccaggggtg
 960
 ggccttgggc tcaactccag gactcgtgt cctcagcgag tgccccactg ctgagcggga
 1020
 tcgtagggga ctcccgcgga ggccaggcgg gagagttggg aggggaaggtc ctgg
 1074

<210> 5676

<211> 145

<212> PRT

<213> Homo sapiens

<400> 5676

Glu Val Thr Val Leu Cys Thr Gly Leu Ser Leu Ser Ile Gly Met Thr
 1 5 10 15
 Ala Thr Ser Gln Gly Cys Arg Ala Gly Gly Arg Cys Gly Trp Ala Cys
 20 25 30
 Ala Cys Phe Arg Arg Gln Gln Asn Arg Thr Gln Pro Ala Val Thr Pro
 35 40 45
 His Ser Arg Ser Arg Arg Thr Ala Ser Arg Met Ser Leu Gly Glu Gln
 50 55 60
 Gly Ser Thr Thr Gly Leu Thr Leu Gly His Arg Ala Pro Ala Pro Trp
 65 70 75 80
 Gly Met Ser Trp His Asn His Arg Arg Gln Val Asn Arg Ile Lys Ser
 85 90 95
 Arg Gln Cys Leu Ser Met Ser Glu Thr Ala Val Ala Arg Ala Trp Pro
 100 105 110
 Arg Ala Ala Gly Pro Ala Leu Ala Ile Ser Pro Gly Leu Ala Arg Gly
 115 120 125
 Gly Leu Gly Leu Thr Pro Arg Thr Arg Cys Pro Gln Arg Val Pro His
 130 135 140
 Cys
 145

<210> 5677

<211> 477

<212> DNA

<213> Homo sapiens

<400> 5677

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agcagctgtt cctctttgaa gaggtcgatg ctgaaaggag gccgcctgac tccatggcaa
60
aaaaggacac tgggtgaagta gcggtagcac tctccacgt tgcccaaggg gggtgctggg
120
agggaaagca agatgcagca gtgaggccct ctctggtatc cattcattca cttcactcaa
180
cagctgttta tgaccatgag caatacaagc cttgtgaaga tcttgagca gggcacaagc
240
cgctgacgtc tgctccagtg agaagccctg ctgccttccc caattegctt tctttccgca
300
gccgccgtg ccccgacccc ggatctgcat gtggaagtac ctggacgtcc attccatgca
360
ccagctggag aagaccacca atgctgagat gagggagggtg ctggctgagc tgctggagct
420
agggtgtcct gaggagagcc tgagcgacgc catcacctg gacctcttct gccgcgg
477

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<210> 5678

<211> 151

<212> PRT

<213> Homo sapiens

<400> 5678

```

Met Ala Ser Leu Arg Leu Cys Ser Gly His Pro Ser Ser Ser Ser Ser
1           5           10           15
Ala Ser Thr Ser Leu Ile Ser Ala Leu Val Val Phe Ser Ser Trp Cys
20           25           30
Met Glu Trp Thr Ser Arg Tyr Phe His Met Gln Ile Arg Gly Arg Gly
35           40           45
Ser Gly Gly Cys Gly Lys Lys Ala Asn Trp Gly Arg Gln Gln Gly Phe
50           55           60
Ser Leu Glu Gln Thr Ser Ala Ala Cys Ala Leu Leu Gln Asp Leu His
65           70           75           80
Lys Ala Cys Ile Ala His Gly His Lys Gln Leu Leu Ser Glu Val Asn
85           90           95
Glu Trp Ile Pro Glu Arg Ala Ser Leu Leu His Leu Ala Phe Pro Thr
100          105          110
Ser Asn Pro Leu Gly Gln Arg Gly Gly Val Leu Pro Leu Leu His Gln
115          120          125
Cys Pro Phe Leu Pro Trp Ser Gln Ala Ala Ser Phe Gln His Arg Pro
130          135          140
Leu Gln Arg Gly Thr Ala Ala
145          150

```

<210> 5679

<211> 665

<212> DNA

<213> Homo sapiens

<400> 5679

nngccctcc aggagggagc cgggagatta cgcagctcca tgtaggtcta cgttttaggtt
 60
 gggaggatct accatgaaga aggtcaagaa gaaaaggta gaggccagac gccaccggac
 120
 tccacctccc agcatgctgg ctccaattcc acctctcagc agcctagccc tgaatccaca
 180
 ccacagcagc ctagtcctga atccacacca cagcagccta gccctgaatc cacaccacag
 240
 cattccagcc ttgaaaccac ctcccggcag ccagcattcc aagcccttcc agcaccggaa
 300
 atccgcccgt cctcttgctg ccttttatct ccagatgcta acgtgaaggc agcccctcaa
 360
 tccaggaaag cagaaaatct tcaagaaaac cctccagtca tcgtaacgag tgcctccaa
 420
 gccctcgaa ctgtggctgt ggctctgggg gctctaggag ctgcctacta catcactgaa
 480
 tccttgtaga caagccccta ggcccacagt ctggcagacc tccaccagcc ccaggagttg
 540
 ataggatgat gcgctgggag aagatgttca gaatatctca aaagccaagt ccagaagatc
 600
 cagtttccat caaagggacc tctcttgtag ccaaaattta aaaaaagaaa aaaaaaacga
 660
 aaaaa
 665

<210> 5680

<211> 143

<212> PRT

<213> Homo sapiens

<400> 5680

Val	Gly	Arg	Ile	Tyr	His	Glu	Glu	Gly	Gln	Glu	Glu	Lys	Val	Arg	Gly
1				5				10						15	
Gln	Thr	Pro	Pro	Asp	Ser	Thr	Ser	Gln	His	Ala	Gly	Ser	Asn	Ser	Thr
			20					25					30		
Ser	Gln	Gln	Pro	Ser	Pro	Glu	Ser	Thr	Pro	Gln	Gln	Pro	Ser	Pro	Glu
		35					40					45			
Ser	Thr	Pro	Gln	Gln	Pro	Ser	Pro	Glu	Ser	Thr	Pro	Gln	His	Ser	Ser
	50					55					60				
Leu	Glu	Thr	Thr	Ser	Arg	Gln	Pro	Ala	Phe	Gln	Ala	Leu	Pro	Ala	Pro
65					70				75					80	
Glu	Ile	Arg	Arg	Ser	Ser	Cys	Cys	Leu	Leu	Ser	Pro	Asp	Ala	Asn	Val
			85					90					95		
Lys	Ala	Ala	Pro	Gln	Ser	Arg	Lys	Ala	Glu	Asn	Leu	Gln	Glu	Asn	Pro
			100					105					110		
Pro	Val	Ile	Val	Thr	Arg	Val	Leu	Gln	Ala	Leu	Gly	Thr	Val	Ala	Val
		115					120					125			
Ala	Leu	Gly	Ala	Leu	Gly	Ala	Tyr	Tyr	Ile	Thr	Glu	Ser	Leu		
	130					135					140				

<210> 5681

<211> 1402

<212> DNA

<213> Homo sapiens

<400> 5681

gggcggcctg gcagctggcg gcattgaggg ggaccgtcta gaggtccgtc tgaccgcggg
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gtcgggacct gggttcggg catgagctga gagcaccacg ccgaggccac gagtatttca
120
tagacattga tggaagcaga aacaaaaact cttcccctgg agaatgcac catcctttca
180
gagggctctc tgcaggaagg acaccgatta tggattggca acctggaccc caaaattacc
240
gaataccacc tctcaagct cctccagaag tttggcaagg taaagcagtt tgacttcctc
300
ttccacaagt caggtgcttt ggagggacag cctcgaggct actgttttgt taactttgaa
360
actaagcagg aagcagagca agccatccag tgtctcaatg gcaagttggc cctgtccaag
420
aagctggtgg tgcgatggg acatgctcaa gtaaagagat atgatacata caagaatgat
480
aagattcttc caatcagtct cgagccatcc tcaagcactg agcctactca gtctaaccta
540
agtgtcactg caaagataaa agccattgaa gcaaaactga aaatgatggc ggaaaatcct
600
gatgcagagt atccagcagc gcctgtttat tctacttta agccaccaga taaaaaagg
660
actactccat attctagaac agcatggaaa tctcgaagat gatggttggt aattactgta
720
gcagcaaaag caaattgggt tccacaccta aaatcgtctg cctgtgtact ttgtagatgt
780
gaatgggtact attcaacgga gcacaatcac atgttagcat ttggtaacat aatgtttttg
840
gatgttctta tggatgtttc ttccctaaac tatgtatgga attgagcatc atccagaata
900
aatagcgttg tatcccaa atgtgatttga accctgggat gctctaattg gctggttggt
960
ttggatttgt aactccagaa acattctata gtgtgccaga gcaaaaggca aatacacaaa
1020
atattattta aatcaggaaa ctaaaaatat taacatctat taaaaaattg agcatttttc
1080
tacgctcgtg tgtcttttac aacataaaga aaaagtaaaa ggcagggagg gaagtgagag
1140
acagatttta aatcatgttc agaactgttg ttccagaatt tactacggca atccctccaa
1200
ctggactgaa aaagagaaag ttcttgga aaaggagctg attctttgaa caaatgttgt
1260
agtaatctgt ttaagaatta tgcttattgt ttcaaatcc caactaggaa aacatggtgt
1320
atatcttaaa attgtttgtg ttgacaaaac tagaatcaaa ttaacattt tataccacat
1380
cacaagttct atttgggata tt
1402

<210> 5682

<211> 190

<212> PRT

<213> Homo sapiens

<400> 5682

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Met Glu Ala Glu Thr Lys Thr Leu Pro Leu Glu Asn Ala Ser Ile Leu
 1             5             10             15
Ser Glu Gly Ser Leu Gln Glu Gly His Arg Leu Trp Ile Gly Asn Leu
      20             25             30
Asp Pro Lys Ile Thr Glu Tyr His Leu Leu Lys Leu Leu Gln Lys Phe
      35             40             45
Gly Lys Val Lys Gln Phe Asp Phe Leu Phe His Lys Ser Gly Ala Leu
      50             55             60
Glu Gly Gln Pro Arg Gly Tyr Cys Phe Val Asn Phe Glu Thr Lys Gln
65             70             75             80
Glu Ala Glu Gln Ala Ile Gln Cys Leu Asn Gly Lys Leu Ala Leu Ser
      85             90             95
Lys Lys Leu Val Val Arg Trp Ala His Ala Gln Val Lys Arg Tyr Asp
      100            105            110
His Asn Lys Asn Asp Lys Ile Leu Pro Ile Ser Leu Glu Pro Ser Ser
      115            120            125
Ser Thr Glu Pro Thr Gln Ser Asn Leu Ser Val Thr Ala Lys Ile Lys
      130            135            140
Ala Ile Glu Ala Lys Leu Lys Met Met Ala Glu Asn Pro Asp Ala Glu
145            150            155            160
Tyr Pro Ala Ala Pro Val Tyr Ser Tyr Phe Lys Pro Pro Asp Lys Lys
      165            170            175
Arg Thr Thr Pro Tyr Ser Arg Thr Ala Trp Lys Ser Arg Arg
      180            185            190

```

<210> 5683

<211> 328

<212> DNA

<213> Homo sapiens

<400> 5683

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ggatccatgc gttgccctag ggaggcctca gctgtcaagc actgaccatc tctgcagaca
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cgaggggctg acctgtactg gtgagtaagc attagccatg ggacgcacac aatccagcca
120
atgcttttcag aaggcaccac atgtgatgca cagcctctat ttacatgtga ataattacac
180
tgctgctttc tggttaaaag tagggaaata cagtgttcca gggcatagga atggtgctct
240
gggtagaaaa gtttatattg ctggtgggag gcagggtttg ttaataaagc tttgaaatac
300
acaaatttca ttctggatgc tgatgctg
328

```

<210> 5684

<211> 103

<212> PRT

<213> Homo sapiens

<400> 5684

```

Met Lys Phe Val Tyr Phe Lys Ala Leu Leu Thr Lys Pro Ala Ser His

```

```

      1           5           10           15
Gln Gln Asn Lys Leu Phe Tyr Pro Glu His His Ser Tyr Ala Leu Glu
      20           25           30
His Cys Ile Ser Leu Leu Leu Thr Arg Lys Gln Gln Cys Asn Tyr Ser
      35           40           45
His Val Asn Arg Gly Cys Ala Ser His Val Val Pro Ser Glu Ser Ile
      50           55           60
Gly Trp Ile Val Cys Val Pro Trp Leu Met Leu Thr His Gln Tyr Arg
      65           70           75           80
Ser Ala Leu Arg Val Cys Arg Asp Gly Gln Cys Leu Thr Ala Glu Ala
      85           90           95
Ser Leu Gly Gln Arg Met Asp
      100

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<210> 5685

<211> 604

<212> DNA

<213> Homo sapiens

<400> 5685

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ccatgcagcc gcgtgggtgg caagcgggtg gtgtgctatg acgacagatt cattgtgaag
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ctggcctacg agtctgacgg gatcgtggtt tccaacgaca cataccgtga cctccaaggc
120
gagcggcagg agtgaagcgg cttcatcgag gagcggctgc tcatgtactc cttcgtcaat
180
gacaagtatg ttccctccca gaggcctga cagacttggg gtccacaggg gaagccagag
240
gtgcccttgg caaggggtgga gctgggggct gggctctgcg gggccctgtg gccatgggag
300
gttgcgggtc ttggctccag gcagctttga gagtgagacg gatagctcac cacataggag
360
aatcagacc gggaccaggc aggctgtggg gtggagagag tggctaattt gggagataga
420
gccgtagcac ttatgagggg atgtatgtgg ttgatggttc caggtggcct ctctacgaac
480
caacatggca tctctcgagc agaggccatg ggccagtggg tgcgggctgc catccccga
540
cgacttcagg gagggagttc ccctaaaggt gcccatgggc tgtggccctc tagaccgggg
600
atcc
604

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<210> 5686

<211> 69

<212> PRT

<213> Homo sapiens

<400> 5686

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Pro Cys Ser Arg Val Gly Gly Lys Arg Val Val Cys Tyr Asp Asp Arg
1           5           10           15
Phe Ile Val Lys Leu Ala Tyr Glu Ser Asp Gly Ile Val Val Ser Asn
      20           25           30
Asp Thr Tyr Arg Asp Leu Gln Gly Glu Arg Gln Glu Trp Lys Arg Phe

```

35 40 45
 Ile Glu Glu Arg Leu Leu Met Tyr Ser Phe Val Asn Asp Lys Tyr Val
 50 55 60
 Pro Ser Gln Arg Pro
 65

<210> 5687
 <211> 328
 <212> DNA
 <213> Homo sapiens

<400> 5687
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 120
 ggtggatccg aaactctggc tgacgggaag agctgtgaga atgtggatga atgtgtgggc
 180
 ctgcagccgg tgtgccccca ggggaccaca tgcataca cgggtggaag cttccagtgt
 240
 gtcagccctg agtgcgccga gggcagcggc aatgtgagct acgtgaagac gtctccattc
 300
 cagtgtgagc ggaaccctg ccccatgg
 328

<210> 5688
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 5688
 Thr Leu Ser Arg Pro Arg Gly Ala Gly Lys Gly Gly Gly Asp Gly Gly
 1 5 10 15
 Gly Gly Glu Arg Pro Arg Leu Cys Met His Ala Cys Val Asn Thr Pro
 20 25 30
 Gly Ser Ser Arg Cys Thr Cys Pro Gly Gly Ser Glu Thr Leu Ala Asp
 35 40 45
 Gly Lys Ser Cys Glu Asn Val Asp Glu Cys Val Gly Leu Gln Pro Val
 50 55 60
 Cys Pro Gln Gly Thr Thr Cys Ile Asn Thr Gly Gly Ser Phe Gln Cys
 65 70 75 80
 Val Ser Pro Glu Cys Pro Glu Gly Ser Gly Asn Val Ser Tyr Val Lys
 85 90 95
 Thr Ser Pro Phe Gln Cys Glu Arg Asn Pro Cys Pro Met
 100 105

<210> 5689
 <211> 1897
 <212> DNA
 <213> Homo sapiens

<400> 5689
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120
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180
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300
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360
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420
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480
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540
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720
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1440
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1620
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1680

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 1740
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 1800
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 1860
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 1897

<210> 5690

<211> 54

<212> PRT

<213> Homo sapiens

<400> 5690

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Val	Gly	Gln	Cys	Val	Val	Val	Phe	Ser	Gln	Ala	Pro	Ser	Gly	Arg	Ala
		20					25				30				
Pro	Leu	Ser	Pro	Ser	Leu	Asn	Ser	Arg	Pro	Ser	Pro	Ile	Ser	Ala	Thr
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Xaa	Ser	Ser	Ser	Arg	Ser										
		50													

<210> 5691

<211> 1227

<212> DNA

<213> Homo sapiens

<400> 5691

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 120
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 gtggtgaatc ctaacaaggc caccattggt gtggggctgg gctgccatca ttcaaaccag
 240
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 300
 aacagcagat gctagaagac aagaaacggg ccacagactg ggaggccaca aatgaagcca
 360
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 420
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 600
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 660
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 720

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 780
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 840
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 960
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 1020
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 1080
 ctgatgccag ggaggtggga ggaagaagtg ggaaatttcc cttcccagta cccccaagaa
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 1227

<210> 5692

<211> 86

<212> PRT

<213> Homo sapiens

<400> 5692

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Ala	Glu	Met	Tyr	Asn	Arg	Pro	Val	Glu	Val	Tyr	Gln	Tyr	Ser	Thr	Glu
		20						25					30		
Pro	Ile	Asn	Thr	Phe	His	Gly	Ile	His	Gln	Asn	Glu	Asp	Glu	Pro	Ile
		35					40					45			
Arg	Val	Ser	Tyr	His	Arg	Asn	Ile	His	Tyr	Asn	Ser	Val	Val	Asn	Pro
		50				55					60				
Asn	Lys	Ala	Thr	Ile	Gly	Val	Gly	Leu	Gly	Cys	His	His	Ser	Asn	Gln
65					70					75				80	
Gly	Leu	Gln	Ser	Ser	Leu										
					85										

<210> 5693

<211> 389

<212> DNA

<213> Homo sapiens

<400> 5693

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 120
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 180
 ctgggccctc ccgggttggg gagctgacgg cagcttcccc ccacagggtgc ctctgagcct
 240
 cggaacatga tctacatgag ccgcttgggt atctggggcg agggcacacc cttccggaac
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 360
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 389

<210> 5694
 <211> 60
 <212> PRT
 <213> Homo sapiens

<400> 5694
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 Met Ser Arg Leu Gly Ile Trp Gly Glu Gly Thr Pro Phe Arg Asn Phe
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 35 40 45
 Ile Val Ala Met Asp Met Lys Val Ser Gly His Val
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<210> 5695
 <211> 1417
 <212> DNA
 <213> Homo sapiens

<400> 5695
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 180
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 300
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 360
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 420
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 480
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 540
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 600
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 660
 cggcgcccg tggagcaggt gctgtaccac ggcaagcagg caccggcagt gcctgacatc
 720
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 780
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 840

gatggccata aggcgggtgtt cgtggcacgg gtgctgactg gcgactacgg gcagggccgc
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<210> 5696

<211> 368

<212> PRT

<213> Homo sapiens

<400> 5696

Val	Ala	Leu	His	Arg	Ser	Leu	Lys	Pro	Gln	Gly	Gln	Val	Gly	Glu	Gln
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Glu	Glu	Ala	Gly	Ala	Leu	Arg	Gln	Ala	Leu	Thr	Phe	Ser	Leu	Leu	Glu
		20					25						30		
Gln	Pro	Pro	Leu	Glu	Ala	Glu	Glu	Pro	Pro	Asp	Arg	Gly	Thr	Asp	Gly
		35				40						45			
Lys	Ala	Gln	Leu	Val	Val	His	Ser	Ala	Phe	Glu	Gln	Asp	Val	Glu	Glu
	50				55					60					
Leu	Asp	Arg	Ala	Leu	Arg	Ala	Ala	Leu	Glu	Val	His	Val	Gln	Glu	Glu
65				70					75					80	
Thr	Val	Gly	Pro	Trp	Arg	Arg	Thr	Leu	Pro	Ala	Glu	Leu	Arg	Ala	Arg
			85					90						95	
Leu	Glu	Arg	Cys	His	Gly	Val	Ser	Val	Ala	Leu	Arg	Gly	Asp	Cys	Thr
		100						105					110		
Ile	Leu	Arg	Gly	Phe	Gly	Ala	His	Pro	Ala	Arg	Ala	Ala	Arg	His	Leu
		115				120					125				
Val	Ala	Leu	Leu	Ala	Gly	Pro	Trp	Asp	Gln	Ser	Leu	Ala	Phe	Pro	Leu
	130				135						140				
Ala	Ala	Ser	Gly	Pro	Thr	Leu	Ala	Gly	Gln	Thr	Leu	Lys	Gly	Pro	Trp
145				150					155					160	
Asn	Asn	Leu	Glu	Arg	Leu	Ala	Glu	Asn	Thr	Gly	Glu	Phe	Gln	Glu	Val
			165					170						175	
Val	Arg	Ala	Phe	Tyr	Asp	Thr	Leu	Asp	Ala	Ala	Arg	Ser	Ser	Ile	Arg
		180						185					190		
Val	Val	Arg	Val	Glu	Arg	Val	Ser	His	Pro	Leu	Leu	Gln	Gln	Gln	Tyr
		195				200						205			
Glu	Leu	Tyr	Arg	Glu	Arg	Leu	Leu	Gln	Arg	Cys	Glu	Arg	Arg	Pro	Val

210		215		220
Glu Gln Val Leu Tyr His Gly Thr Thr Ala Pro Ala Val Pro Asp Ile				
225		230		235
Cys Ala His Gly Phe Asn Arg Ser Phe Cys Gly Arg Asn Ala Thr Val				240
	245		250	255
Tyr Gly Lys Gly Val Tyr Phe Ala Arg Arg Ala Ser Leu Ser Val Gln				
	260		265	270
Asp Arg Tyr Ser Pro Pro Asn Ala Asp Gly His Lys Ala Val Phe Val				
	275		280	285
Ala Arg Val Leu Thr Gly Asp Tyr Gly Gln Gly Arg Arg Gly Leu Arg				
	290		295	300
Ala Pro Pro Leu Arg Gly Pro Gly His Val Leu Leu Arg Tyr Asp Ser				
305		310		315
Ala Val Asp Cys Ile Cys Gln Pro Ser Ile Phe Val Ile Phe His Asp				
	325		330	335
Thr Gln Ala Leu Pro Thr His Leu Ile Thr Cys Glu His Val Pro Arg				
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Ala Ser Pro Asp Asp Pro Ser Gly Leu Pro Gly Arg Ser Pro Asp Thr				
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<210> 5697

<211> 3362

<212> DNA

<213> Homo sapiens

<400> 5697

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 120
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 180
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 3362

<210> 5698

<211> 403

<212> PRT

<213> Homo sapiens

<400> 5698

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Phe	Leu	Leu	Leu	Phe	Val	Ile	Thr	Ser	Val	Ala	Ser	Glu	Asn	Ala	Ser
			20					25					30		
Thr	Ser	Arg	Gly	Cys	Gly	Leu	Asp	Leu	Leu	Pro	Gln	Tyr	Val	Ser	Leu
		35				40					45				
Cys	Asp	Leu	Asp	Ala	Ile	Trp	Gly	Ile	Val	Val	Glu	Ala	Val	Ala	Gly
	50				55					60					
Ala	Gly	Ala	Leu	Ile	Thr	Leu	Leu	Leu	Met	Leu	Ile	Leu	Leu	Val	Arg
65				70					75					80	
Leu	Pro	Phe	Ile	Lys	Glu	Lys	Glu	Lys	Lys	Ser	Pro	Val	Gly	Leu	His
			85					90					95		
Phe	Leu	Phe	Leu	Leu	Gly	Thr	Leu	Gly	Leu	Phe	Gly	Leu	Thr	Phe	Ala
			100					105					110		
Phe	Ile	Ile	Gln	Glu	Asp	Glu	Thr	Ile	Cys	Ser	Val	Arg	Arg	Phe	Leu
		115				120						125			
Trp	Gly	Val	Leu	Phe	Ala	Leu	Cys	Phe	Ser	Cys	Leu	Leu	Ser	Gln	Ala

130 135 140
 Trp Arg Val Arg Arg Leu Val Arg His Gly Thr Gly Pro Ala Gly Trp
 145 150 155 160
 Gln Leu Val Gly Leu Ala Leu Cys Leu Met Leu Val Gln Val Ile Ile
 165 170 175
 Ala Val Glu Trp Leu Val Leu Thr Val Leu Arg Asp Thr Arg Pro Ala
 180 185 190
 Cys Ala Tyr Glu Pro Met Asp Phe Val Met Ala Leu Ile Tyr Asp Met
 195 200 205
 Val Leu Leu Val Val Thr Leu Gly Leu Ala Leu Phe Thr Leu Cys Gly
 210 215 220
 Lys Phe Lys Arg Trp Lys Leu Asn Gly Ala Phe Leu Leu Ile Thr Ala
 225 230 235 240
 Phe Leu Ser Val Leu Ile Trp Val Ala Trp Met Thr Met Tyr Leu Phe
 245 250 255
 Gly Asn Val Lys Leu Gln Gln Gly Asp Ala Trp Asn Asp Pro Thr Leu
 260 265 270
 Ala Ile Thr Leu Ala Ala Ser Gly Trp Val Phe Val Ile Phe His Ala
 275 280 285
 Ile Pro Glu Ile His Cys Thr Leu Leu Pro Ala Leu Gln Glu Asn Thr
 290 295 300
 Pro Asn Tyr Phe Asp Thr Ser Gln Pro Arg Met Arg Glu Thr Ala Phe
 305 310 315 320
 Glu Glu Asp Val Gln Leu Pro Arg Ala Tyr Met Glu Asn Lys Ala Phe
 325 330 335
 Ser Met Asp Glu His Asn Ala Ala Leu Arg Thr Ala Gly Phe Pro Asn
 340 345 350
 Gly Ser Leu Gly Lys Arg Pro Ser Gly Ser Leu Gly Lys Arg Pro Ser
 355 360 365
 Ala Pro Phe Arg Ser Asn Val Tyr Gln Pro Thr Glu Met Ala Val Val
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 His Leu Trp

<210> 5699

<211> 1565

<212> DNA

<213> Homo sapiens

<400> 5699

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<210> 5700

<211> 197

<212> PRT

<213> Homo sapiens

<400> 5700

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<210> 5702

<211> 348

<212> PRT

<213> Homo sapiens

<400> 5702

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<210> 5703

<211> 1496

<212> DNA

<213> Homo sapiens

<400> 5703

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<211> 269

<212> PRT

<213> Homo sapiens

<400> 5704

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<210> 5705

<211> 768

<212> DNA

<213> Homo sapiens

<400> 5705

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<210> 5706
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 65 70 75 80
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<211> 506

<212> PRT

<213> Homo sapiens

<400> 5708

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<212> DNA

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<400> 5709

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 Pro Pro Leu Asn Ile His Tyr Leu Lys Leu Ile Asp Arg Glu Asn Phe
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 1980
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 1996

<210> 5714

<211> 408

<212> PRT

<213> Homo sapiens

<400> 5714

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			20					25					30		
Val	Ser	Glu	Phe	Phe	Met	Asn	Ala	Lys	Lys	Asn	Lys	Pro	Glu	Trp	Arg
			35				40					45			
Glu	Glu	Gln	Met	Ala	Ser	Ile	Lys	Lys	Asp	Tyr	Tyr	Lys	Ala	Leu	Glu
			50			55					60				
Asp	Ala	Asp	Glu	Lys	Val	Gln	Leu	Ala	Asn	Gln	Ile	Tyr	Asp	Leu	Val
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<210> 5715
<211> 1458
<212> DNA
<213> Homo sapiens
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180
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 720
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 780
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<210> 5716

<211> 148

<212> PRT

<213> Homo sapiens

<400> 5716

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240
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900

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<210> 5718

<211> 228

<212> PRT

<213> Homo sapiens

<400> 5718

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Leu	Leu	Met	Leu	Gly	Val	Thr	Leu	Pro	Asn	Ser	Tyr	Trp	Arg	Val	Ser
			20					25					30		
Thr	Val	His	Gly	Asn	Val	Ile	Thr	Thr	Asn	Thr	Ile	Phe	Glu	Asn	Leu
		35				40					45				
Trp	Phe	Ser	Cys	Ala	Thr	Asp	Ser	Leu	Gly	Val	Tyr	Asn	Cys	Trp	Glu
	50				55					60					
Phe	Pro	Ser	Met	Leu	Ala	Leu	Ser	Gly	Tyr	Ile	Gln	Ala	Cys	Arg	Ala
65				70					75					80	
Leu	Met	Ile	Thr	Ala	Ile	Leu	Leu	Gly	Phe	Leu	Gly	Leu	Leu	Leu	Gly
			85					90						95	
Ile	Ala	Gly	Leu	Arg	Cys	Thr	Asn	Ile	Gly	Gly	Leu	Glu	Leu	Ser	Arg
			100					105						110	
Lys	Ala	Lys	Leu	Ala	Ala	Thr	Ala	Gly	Ala	Leu	His	Ile	Leu	Ala	Gly
		115					120					125			
Ile	Cys	Gly	Met	Val	Ala	Ile	Ser	Trp	Tyr	Ala	Phe	Asn	Ile	Thr	Arg
	130					135					140				
Asp	Phe	Phe	Asp	Pro	Leu	Tyr	Pro	Gly	Thr	Lys	Tyr	Glu	Leu	Gly	Pro
145				150					155					160	
Ala	Leu	Tyr	Leu	Gly	Trp	Ser	Ala	Ser	Leu	Ile	Ser	Ile	Leu	Gly	Gly
			165					170						175	
Leu	Cys	Leu	Cys	Ser	Ala	Cys	Cys	Cys	Gly	Ser	Asp	Glu	Asp	Pro	Ala
		180					185					190			
Ala	Ser	Ala	Arg	Arg	Pro	Tyr	Gln	Ala	Pro	Val	Ser	Val	Met	Pro	Val
		195					200					205			
Ala	Thr	Ser	Asp	Gln	Glu	Gly	Asp	Ser	Ser	Phe	Gly	Lys	Tyr	Gly	Arg
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Asn	Ala	Tyr	Val												

225

<210> 5719

<211> 2267

<212> DNA

<213> Homo sapiens

<400> 5719

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180
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240
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<210> 5720

<211> 455

<212> PRT

<213> Homo sapiens

<400> 5720

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Gln	Gln	Gln	Arg	Gly	His	Gly	Ala	Val	His	Ala	Ala	Gly	Gln	Gly	Ala
			20				25					30			
His	Asp	Val	Pro	Gln	Gly	Leu	His	Pro	Pro	Val	Ala	Pro	Ser	Gly	Gly
	35					40					45				
Val	Asp	Ser	Ala	Val	Ala	Ala	Leu	Leu	Leu	Arg	Arg	Arg	Gly	Tyr	Gln
	50				55					60					
Val	Thr	Gly	Val	Phe	Met	Lys	Asn	Trp	Asp	Ser	Leu	Asp	Glu	His	Gly
65				70					75				80		
Val	Cys	Thr	Ala	Asp	Lys	Asp	Cys	Glu	Asp	Ala	Tyr	Arg	Val	Cys	Gln
			85					90					95		
Ile	Leu	Asp	Ile	Pro	Phe	His	Gln	Val	Ser	Tyr	Val	Lys	Glu	Tyr	Trp
	100						105					110			
Asn	Asp	Val	Phe	Ser	Asp	Phe	Leu	Asn	Glu	Tyr	Glu	Lys	Gly	Arg	Thr
	115					120					125				
Pro	Asn	Pro	Asp	Ile	Val	Cys	Asn	Lys	His	Ile	Lys	Phe	Ser	Cys	Phe

130		135		140	
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145		150		155	160
His Tyr Ala Arg Thr Ser Leu Glu Asp Glu Glu Val Phe Glu Gln Lys					
	165		170		175
His Val Lys Lys Pro Glu Gly Leu Phe Arg Asn Arg Phe Glu Val Arg					
	180		185		190
Asn Ala Val Lys Leu Leu Gln Ala Ala Asp Ser Phe Lys Asp Gln Thr					
	195		200		205
Phe Phe Leu Ser Gln Val Ser Gln Asp Ala Leu Arg Arg Thr Ile Phe					
	210		215		220
Pro Leu Gly Gly Leu Thr Lys Glu Phe Val Lys Lys Ile Ala Ala Glu					
225		230		235	240
Asn Arg Leu His His Val Leu Gln Lys Lys Glu Ser Met Gly Met Cys					
	245		250		255
Phe Ile Gly Lys Arg Asn Phe Glu His Phe Leu Leu Gln Tyr Leu Gln					
	260		265		270
Pro Arg Pro Gly His Phe Ile Ser Ile Glu Asp Asn Lys Val Leu Gly					
	275		280		285
Thr His Lys Gly Trp Phe Leu Tyr Thr Leu Gly Gln Arg Ala Asn Ile					
	290		295		300
Gly Gly Leu Arg Glu Pro Trp Tyr Val Val Glu Lys Asp Ser Val Lys					
305		310		315	320
Gly Asp Val Phe Val Ala Pro Arg Thr Asp His Pro Ala Leu Tyr Arg					
	325		330		335
Asp Leu Leu Arg Thr Ser Arg Val His Trp Ile Ala Glu Glu Pro Pro					
	340		345		350
Ala Ala Leu Val Arg Asp Lys Met Met Glu Cys His Phe Arg Phe Arg					
	355		360		365
His Gln Met Ala Leu Val Pro Cys Val Leu Thr Leu Asn Gln Asp Gly					
	370		375		380
Thr Val Trp Val Thr Ala Val Gln Ala Val Arg Ala Leu Ala Thr Gly					
385		390		395	400
Gln Phe Ala Val Phe Tyr Lys Gly Asp Glu Cys Leu Gly Ser Gly Lys					
	405		410		415
Ile Leu Arg Leu Gly Pro Ser Ala Tyr Thr Leu Gln Lys Gly Gln Arg					
	420		425		430
Arg Ala Gly Met Ala Thr Glu Ser Pro Ser Asp Ser Pro Glu Asp Gly					
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Pro Gly Leu Ser Pro Leu Leu					
450		455			

<210> 5721

<211> 400

<212> DNA

<213> Homo sapiens

<400> 5721

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120

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180

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<210> 5722
 <211> 80
 <212> PRT
 <213> Homo sapiens

<400> 5722
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 Glu Arg Lys Ala Leu Met Leu Ala Met Gly Tyr His Glu Lys Gly Arg
 20 25 30
 Ala Phe Leu Lys Arg Lys Glu Tyr Gly Ile Ala Leu Pro Cys Leu Leu
 35 40 45
 Asp Ala Asp Lys Tyr Phe Trp Trp Ala Leu Leu Tyr Leu Val Asn Thr
 50 55 60
 Ser Phe Lys Glu Asp Gly Pro Asp Tyr Thr Glu His Leu Pro Cys Pro
 65 70 75 80

<210> 5723
 <211> 376
 <212> DNA
 <213> Homo sapiens

<400> 5723
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<210> 5724
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 5724
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      20           25           30
Met Gly Val Pro Glu Val Trp Gly Leu Leu Ser Lys Glu Trp Trp His
      35           40           45
Ala Gly Leu Ser Gly Ala Met Trp His Gly Trp Trp Ala Ser Ile Cys
      50           55           60
Ser Gly Cys Leu Leu Ser Asp Glu Gly Thr Gly Cys Pro Cys Leu Pro
      65           70           75           80
Gln His Ala Pro Cys Pro Ala Cys Pro Leu Pro Cys Met Ser Pro Val
      85           90           95
Leu His Ile Pro Cys Pro Ala Gly Pro Ile Leu Ser Cys Met Ser Pro
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Val Leu His Met Pro Cys Pro Ala Leu Leu Leu His Ala
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<210> 5725

<211> 1160

<212> DNA

<213> Homo sapiens

<400> 5725

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960

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<210> 5726

<211> 273

<212> PRT

<213> Homo sapiens

<400> 5726

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Ser	Arg	Pro	Pro	Gly	Ser	Arg	Pro	Thr	Ala	His	Gly	Arg	Ala	Trp	Gly
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Ser	Thr	Asp	Asp	Ser	Ala	Val	Pro	Pro	Pro	Gly	Gly	Ala	Pro	His	Phe
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Gly	His	Tyr	Arg	Thr	Gly	Gly	Gly	Ala	Met	Gly	Leu	Arg	Ser	Ala	Ser
				85					90					95	
Val	Ser	Ser	Val	Ala	Gly	Met	Gly	Met	Asp	Pro	Ser	Thr	Ala	Gly	Gly
			100					105					110		
Val	Pro	Phe	Gly	Leu	Tyr	Thr	Pro	Ala	Ser	Arg	Gly	Thr	Gly	Asp	Ser
			115				120					125			
Glu	Arg	Ala	Pro	Gly	Gly	Gly	Gly	Ser	Ala	Ser	Asp	Ser	Thr	Tyr	Ala
	130					135					140				
His	Gly	Asn	Gly	Tyr	Gln	Glu	Thr	Gly	Gly	Gly	His	His	Arg	Asp	Gly
145					150					155				160	
Met	Leu	Tyr	Leu	Gly	Ser	Arg	Ala	Ser	Leu	Ala	Asp	Ala	Leu	Pro	Leu
			165						170					175	
His	Ile	Ala	Pro	Arg	Trp	Phe	Ser	Ser	His	Ser	Gly	Phe	Lys	Cys	Pro
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Ile	Cys	Ser	Lys	Ser	Val	Ala	Ser	Asp	Glu	Met	Glu	Met	His	Phe	Ile
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Met	Cys	Leu	Ser	Lys	Pro	Arg	Leu	Ser	Tyr	Asn	Asp	Asp	Val	Leu	Thr
	210					215					220				
Lys	Asp	Ala	Gly	Glu	Cys	Val	Ile	Cys	Leu	Glu	Glu	Leu	Leu	Gln	Gly
225					230					235				240	
Asp	Thr	Ile	Ala	Arg	Leu	Pro	Cys	Leu	Cys	Ile	Tyr	His	Lys	Ser	Cys
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Asp

<210> 5727

<211> 1237

<212> DNA

<213> Homo sapiens

<400> 5727

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240
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1237

<210> 5728

<211> 368

<212> PRT

<213> Homo sapiens

<400> 5728

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Lys Tyr Arg Asp Ile Asp Glu Asp Glu Ile Leu Arg Thr Leu Ser Pro
      35           40           45
Glu Glu Leu Glu Gln Leu Asp Cys Glu Leu Gln Glu Met Asp Pro Glu
      50           55           60
Asn Met Leu Leu Pro Ala Gly Leu Arg Gln Arg Asp Gln Thr Lys Lys
      65           70           75           80
Ser Pro Thr Gly Pro Leu Asp Arg Glu Ala Leu Leu Gln Tyr Leu Glu
      85           90           95
Gln Gln Ala Leu Glu Val Lys Glu Arg Asp Asp Leu Val Pro Phe Thr
      100           105           110
Gly Glu Lys Lys Gly Lys Pro Tyr Ile Gln Pro Lys Arg Glu Ile Pro
      115           120           125
Ala Glu Glu Gln Ile Thr Leu Glu Pro Glu Leu Glu Glu Ala Leu Ala
      130           135           140
His Ala Thr Asp Ala Glu Met Cys Asp Ile Ala Ala Ile Leu Asp Met
      145           150           155           160
Tyr Thr Leu Met Ser Asn Lys Gln Tyr Tyr Asp Ala Leu Cys Ser Gly
      165           170           175
Glu Ile Cys Asn Thr Glu Gly Ile Ser Ser Val Val Gln Pro Asp Lys
      180           185           190
Tyr Lys Pro Val Pro Asp Glu Pro Pro Asn Pro Thr Asn Ile Glu Glu
      195           200           205
Ile Leu Lys Arg Val Arg Ser Asn Asp Lys Glu Leu Glu Glu Val Asn
      210           215           220
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      225           230           235           240
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      245           250           255
Thr Arg Ser Gly Asp Pro Ile Ala Asn Ala Val Ala Asp Met Leu Arg
      260           265           270
Glu Asn Arg Ser Leu Gln Ser Leu Asn Ile Glu Ser Asn Phe Ile Ser
      275           280           285
Ser Thr Gly Leu Met Ala Val Leu Lys Ala Val Arg Glu Asn Ala Thr
      290           295           300
Leu Thr Glu Leu Arg Val Asp Asn Gln Arg Gln Trp Pro Gly Asp Ala
      305           310           315           320
Val Glu Met Glu Met Ala Thr Val Leu Glu Gln Cys Pro Ser Ile Val
      325           330           335
Arg Phe Gly Tyr His Phe Thr Gln Gln Gly Pro Arg Ala Arg Ala Ala
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Gln Ala Met Thr Arg Asn Asn Glu Leu Arg Arg Gln Gln Lys Lys Arg
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<210> 5729

<211> 381

<212> DNA

<213> Homo sapiens

<400> 5729

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<210> 5730

<211> 64

<212> PRT

<213> Homo sapiens

<400> 5730

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			20					25				30			
Ser	Ser	Ala	Gly	Thr	Ala	Ser	Ser	Ser	Pro	Ala	Ser	Gly	Thr	Cys	Gly
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<210> 5731

<211> 891

<212> DNA

<213> Homo sapiens

<400> 5731

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 720
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 780
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 891

<210> 5732

<211> 193

<212> PRT

<213> Homo sapiens

<400> 5732

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Arg	Arg	Ala	Leu	Ala	Gln	Tyr	Leu	Leu	Phe	Leu	Arg	Leu	Tyr	Pro	Val
		20					25					30			
Leu	Thr	Lys	Ala	Ala	Thr	Ser	Gly	Ile	Leu	Ser	Ala	Leu	Gly	Asn	Phe
		35				40						45			
Leu	Ala	Gln	Met	Ile	Glu	Lys	Lys	Arg	Lys	Lys	Glu	Asn	Ser	Arg	Ser
	50				55			60							
Leu	Asp	Val	Gly	Gly	Pro	Leu	Arg	Tyr	Ala	Val	Tyr	Gly	Phe	Phe	Phe
65			70					75						80	
Thr	Gly	Pro	Leu	Ser	His	Phe	Phe	Tyr	Phe	Phe	Met	Glu	His	Trp	Ile
			85					90						95	
Pro	Pro	Glu	Val	Pro	Leu	Ala	Gly	Leu	Arg	Arg	Leu	Leu	Leu	Asp	Arg
			100					105						110	
Leu	Val	Phe	Ala	Pro	Ala	Phe	Leu	Met	Leu	Phe	Phe	Leu	Ile	Met	Asn
		115					120						125		
Phe	Leu	Glu	Gly	Lys	Asp	Ala	Ser	Ala	Phe	Ala	Ala	Lys	Met	Arg	Gly
	130					135						140			
Gly	Phe	Trp	Pro	Ala	Leu	Arg	Met	Asn	Trp	Arg	Val	Trp	Thr	Pro	Leu
145				150						155				160	
Gln	Phe	Ile	Asn	Ile	Asn	Tyr	Val	Pro	Leu	Lys	Phe	Arg	Val	Leu	Phe
			165					170						175	
Ala	Asn	Leu	Ala	Ala	Leu	Phe	Trp	Tyr	Ala	Tyr	Leu	Ala	Ser	Leu	Gly
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Lys

<210> 5733

<211> 950

<212> DNA

<213> Homo sapiens

<400> 5733

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 840
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<210> 5734

<211> 82

<212> PRT

<213> Homo sapiens

<400> 5734

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Ile	Ser	Phe	Thr	Gly	Ala	Leu	Lys	Ile	Pro	Gly	Val	Ile	Glu	Phe	Ser
			20				25						30		
Leu	Cys	Leu	Leu	Phe	Ala	Lys	Leu	Val	Ser	Tyr	Thr	Phe	Leu	Phe	Trp
			35				40					45			
Leu	Pro	Leu	Tyr	Ile	Thr	Asn	Val	Asp	His	Leu	Asp	Ala	Lys	Lys	Ala
			50			55					60				
Gly	Cys	Thr	Gly	Ser	Pro	Asp	Pro	Leu	Arg	His	Ser	Ser	His	Arg	Thr
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Ser	Lys														

<210> 5735

<211> 4241

<212> DNA

<213> Homo sapiens

<400> 5735

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120
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180
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<210> 5736

<211> 327

<212> PRT

<213> Homo sapiens

<400> 5736

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			20					25					30		
Thr	Val	Arg	Gly	Glu	Arg	Ser	Tyr	Ser	Trp	Gly	Met	Ala	Val	Asn	Val
		35					40				45				
Tyr	Ser	Thr	Ser	Ile	Thr	Gln	Glu	Thr	Met	Ser	Arg	His	Asp	Ile	Ile
	50				55					60					
Ala	Trp	Val	Asn	Asp	Ile	Val	Ser	Leu	Asn	Tyr	Thr	Lys	Val	Glu	Gln
65				70					75					80	
Leu	Cys	Ser	Gly	Ala	Ala	Tyr	Cys	Gln	Phe	Met	Asp	Met	Leu	Phe	Pro
			85					90					95		
Gly	Cys	Ile	Ser	Leu	Lys	Lys	Val	Lys	Phe	Gln	Ala	Lys	Leu	Glu	His

```

      100      105      110
Glu Tyr Ile His Asn Phe Lys Leu Leu Gln Ala Ser Phe Lys Arg Met
      115      120      125
Asn Val Asp Lys Val Ile Pro Val Glu Lys Leu Val Lys Gly Arg Phe
      130      135      140
Gln Asp Asn Leu Asp Phe Ile Gln Trp Phe Lys Lys Phe Tyr Asp Ala
145      150      155      160
Asn Tyr Asp Gly Lys Glu Tyr Asp Pro Val Glu Ala Arg Gln Gly Gln
      165      170      175
Asp Ala Ile Pro Pro Pro Asp Pro Gly Glu Gln Ile Phe Asn Leu Pro
      180      185      190
Lys Lys Ser His His Ala Asn Ser Pro Thr Ala Gly Ala Ala Lys Ser
      195      200      205
Ser Pro Ala Ala Lys Pro Gly Ser Thr Pro Ser Arg Pro Ser Ser Ala
      210      215      220
Lys Arg Ala Ser Ser Ser Gly Ser Ala Ser Lys Ser Asp Lys Asp Leu
225      230      235      240
Glu Thr Gln Val Ile Gln Leu Asn Glu Gln Val His Ser Leu Lys Leu
      245      250      255
Ala Leu Glu Gly Val Glu Lys Glu Arg Asp Phe Tyr Phe Gly Lys Leu
      260      265      270
Arg Glu Ile Glu Leu Leu Cys Gln Glu His Gly Gln Glu Asn Asp Asp
      275      280      285
Leu Val Gln Arg Leu Met Asp Ile Leu Tyr Ala Ser Glu Glu His Glu
      290      295      300
Gly His Thr Glu Glu Pro Glu Ala Glu Glu Gln Ala His Glu Gln Gln
305      310      315      320
Pro Pro Gln Gln Glu Glu Tyr
      325

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<210> 5737
 <211> 340
 <212> DNA
 <213> Homo sapiens

```

<400> 5737
ncaccccccc tggatgtggc tcttcggata tgcctttccc acggagccca gagacaaatg
60
tgcgtggccc tgggacagct ggaccggcct ccagacctcg cccatgacgg gaggagtctg
120
tggctgaaca tcagggggcaa ggaggcggct gcccaatcca tgttccatgt ctccacgcca
180
ctgccagtga tgaccggtgg tttcctgatg tacctgagag ggcagctgga gcctcagtgg
240
aagatgttgc agtgccatcc tcacctggtg gcttgaaatc ggccaagggtg ggagcattta
300
caccgcagaa atgacaccgc acgccagcgc cccgcggccg
340

```

<210> 5738
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 5738

```

Met Leu Pro Pro Trp Pro Ile Ser Ser His Gln Val Arg Met Ala Leu
 1             5             10             15
Gln His Leu Pro Leu Arg Leu Gln Leu Pro Ser Gln Val His Gln Glu
      20             25             30
Thr Thr Gly His His Trp Gln Trp Arg Gly Asp Met Glu His Gly Leu
      35             40             45
Gly Ser Arg Leu Leu Ala Pro Asp Val Gln Pro Gln Thr Pro Pro Val
      50             55             60
Met Gly Glu Val Trp Arg Pro Val Gln Leu Ser Gln Gly His Ala His
65             70             75             80
Leu Ser Leu Gly Ser Val Gly Lys Ala Tyr Pro Lys Ser His Ile Gln
      85             90             95
Gly Gly Xaa

```

<210> 5739

<211> 780

<212> DNA

<213> Homo sapiens

<400> 5739

```

actttcataa ttgtaacatt gaaatcttta atctggaata tgtactggca taaagagtga
60
ggcacataca tggctttact attttccaga gggccaactg cttttactga ataatccatt
120
ttactcgta attggaacaa cctctagcct gtactaaatt tccatattta tttggcccgt
180
ttcaaagtcc tctattctct gctcatctgt ccacatctaa gtgctttaac tattgtggct
240
ttataaaaata ttccaatatc ccataggacc ttatccttag tacttcctat tttaaagttt
300
tccttgcaaga caggtacttt aaataccatc tcacagcacc catcatgtcc tatcttcagg
360
aaataaaaatc tctgggtatt tccaagggaa gtgaaggact gacaccatga ttagaaagca
420
gagccagcac catggcccgt ccctgagcat gtccagcaaa ccctgccagg ctctgcagct
480
cctgagcacc ctgccttcgg gtctgccagt gtgtgggggc cagaagagaa aaacaacca
540
gggggaatgc ctcttcccc cagcagggaa gcagcttgggt catcatctgt ctgaaagcag
600
gtgctgcagc agctggcaac aaagccactc tgaaaggagc tgtgtgcact gcctgtctgg
660
aaggccatgc cagagtccat cgttgcctcc accctacctg tgcaggaaac ctggacatca
720
ccacttcaag gccctacett cttttctggg cagagcccaa ccacaataaa caggacgcgt
780

```

<210> 5740

<211> 120

<212> PRT

<213> Homo sapiens

<400> 5740

```

Met Ile Arg Lys Gln Ser Gln His His Gly Pro Ser Leu Ser Met Ser
 1           5           10           15
Ser Lys Pro Cys Gln Ala Leu Gln Leu Leu Ser Thr Leu Pro Ser Gly
      20           25           30
Leu Pro Val Cys Gly Gly Gln Lys Arg Lys Thr Thr Gln Gly Glu Cys
      35           40           45
Leu Leu Pro Pro Ala Gly Lys Gln Leu Gly His His Leu Ser Glu Ser
      50           55           60
Arg Cys Cys Ser Ser Trp Gln Gln Ser His Ser Glu Arg Ser Cys Val
 65           70           75           80
His Cys Leu Ser Gly Arg Pro Cys Gln Ser Pro Ser Leu Pro Pro Pro
      85           90           95
Tyr Leu Cys Arg Lys Pro Gly His His His Phe Lys Ala Leu Pro Ser
      100          105          110
Phe Leu Gly Arg Ala Gln Pro Gln
      115          120

```

<210> 5741

<211> 2444

<212> DNA

<213> Homo sapiens

<400> 5741

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ggcggctgct gctccggggcc tgggcacagc aagcggcgac gtcaagctcc cgggggttggc
 60
gcgggttggcg ggggcagttcc cgagcgtgag gaggtcggcg caggctacaa cagtgaggac
 120
gagtatgagg cggctgcagc acgcatcgag gctatggacc ctgccactgt cgagcagcag
 180
gagcattggt ttgaaaaggc cctacgagac aagaagggt tcatcatcaa gcagatgaag
 240
gaggatggcg cctgtctctt ccgggctgta gctgaccagg tgtatggaga ccaggacatg
 300
catgaggttg tgcgaaagca ttgcatggac tatctgatga agaagtcga ctacttctcc
 360
aactatgtca cagaggactt taccacctac attaacagga agcgggaaaa caattgccat
 420
ggcaaccaca ttgagatgca ggccatggca gagatgtaca accgtcctgt ggaggtgtac
 480
cagtacagca cagaacccat caacacattc catgggatac atcaaaacga ggacgaaccc
 540
attcgtgtta gctaccatcg gaatatccac tataattcag tggatgaatc taacaaggcc
 600
accattggtg tggggctggg cctgccatca ttcaaaccag ggtttgcaga gcagtctctg
 660
atgaagaatg ccataaaaac atcggaggag tcatggattg aacagcagat gctagaagac
 720
aagaaacggg ccacagactg ggaggccaca aatgaagcca tcgaggagca ggtggctcgg
 780
gaatcctacc tgcagtgggt gcgggatcag gagaaacagg ctgccagggt ccgaggcccc
 840
agccagcccc ggaaagccag cgccacatgc agttcggcca cagcagcagc ctccagtggc
 900

```

ctggaggagt ggactagccg gtccccgcgg cagcggagtt cagcctcgtc acctgagcac
960
cctgagctgc atgctgaatt gggcatgaag ccccttccc caggcactgt tttagctctt
1020
gccaaacctc cttcgccctg tgcgccaggt acaagcagtc agttctcggc agggggccgac
1080
cgggcaactt ccccccttgt gtccctctac cctgctttgg agtgccgggc cctcattcag
1140
cagatgtccc cctctgcctt tgggtctgaat gactgggatg atgatgagat cctagcttcg
1200
gtgctggcag tgtcccaaca ggaataccta gacagtatga agaaaaacaa agtgcacaga
1260
gacccgcccc cagacaagag ttgatggaga cccagggatt ggacaccatc tcccaacccc
1320
agtactcctg ctctccggcg ccacctcacc ttctttggct tcttccctct tgcctccttc
1380
tgttctttct gctctccctt cttttccctc ctctcactt ccctctggct agcccacccc
1440
tgactctctc ctcttgccg ctgccactat cacctgtctc tctgccagct gatgtgccct
1500
gttgcccccc accccatccc gcacagaacc atccctgcat tccacagggg actcggggcaa
1560
gggtgccgaa gatagacaag aggcacacag agacagacca actggcagcc aggcagcccc
1620
agaggagaga gacattcaga cagaggaaag tctccctgcc cctcattcct tccaagatga
1680
gaaaaaactg ccgccacccc ccgacactga tgccaggag gtgggaggaa gaagtgggaa
1740
atttcccttc ccagtacccc caagaacgtc tgagccttca atgttgaatt ttttctttat
1800
taaaattact tttatcttat aaaatcaact aatcaaaaat gatatagacg acagcactgg
1860
ctctgtgaag gtggcatctt tctgggcagg caggccatgg ggcattggagg aggggtgcaaa
1920
gatatgggtt gctgtcttct ggccctccagc tgcattggagg ccggcccagg gtctaggggtg
1980
tgactgggc aagggcaggg cggcagggtg caggccggct tggacaatga aaccctgacc
2040
ttgtgcatt ccttttgctt ccaccaccac tagcttcttt ggaatcttgg ggtgggggtc
2100
atctttgggg attatggctg ccacccgga tttgagtga gggagtgtgg gaggagcctt
2160
ggcagatggg gcacccgtgc cctgcagggt ttgacaagat ccgccatctg taatgtcctt
2220
ggcacaataa aaccaaagt cagtttccct gagcgactct gttctgtgtg gggcaggggt
2280
tgggcgggcc tctgggcaga ggatgcaatg gcacggacct tggcttgacc tcagagggtg
2340
gaatgtctc cagcagggtc tgtctggggg cctggagttt gtatttgatt tgctgcttat
2400
taaacctcct tctggaccta ttgccactgg aaaaaaaaaa aaaa
2444

<210> 5742

<211> 427
 <212> PRT
 <213> Homo sapiens

<400> 5742

```

Gly Gly Cys Cys Ser Gly Pro Gly His Ser Lys Arg Arg Arg Gln Ala
 1           5           10           15
Pro Gly Val Gly Ala Val Gly Gly Gly Ser Pro Glu Arg Glu Glu Val
      20           25           30
Gly Ala Gly Tyr Asn Ser Glu Asp Glu Tyr Glu Ala Ala Ala Ala Arg
      35           40           45
Ile Glu Ala Met Asp Pro Ala Thr Val Glu Gln Gln Glu His Trp Phe
 50           55           60
Glu Lys Ala Leu Arg Asp Lys Lys Gly Phe Ile Ile Lys Gln Met Lys
65           70           75           80
Glu Asp Gly Ala Cys Leu Phe Arg Ala Val Ala Asp Gln Val Tyr Gly
      85           90           95
Asp Gln Asp Met His Glu Val Val Arg Lys His Cys Met Asp Tyr Leu
      100           105           110
Met Lys Asn Ala Asp Tyr Phe Ser Asn Tyr Val Thr Glu Asp Phe Thr
      115           120           125
Thr Tyr Ile Asn Arg Lys Arg Lys Asn Asn Cys His Gly Asn His Ile
      130           135           140
Glu Met Gln Ala Met Ala Glu Met Tyr Asn Arg Pro Val Glu Val Tyr
145           150           155           160
Gln Tyr Ser Thr Glu Pro Ile Asn Thr Phe His Gly Ile His Gln Asn
      165           170           175
Glu Asp Glu Pro Ile Arg Val Ser Tyr His Arg Asn Ile His Tyr Asn
      180           185           190
Ser Val Val Asn Pro Asn Lys Ala Thr Ile Gly Val Gly Leu Gly Leu
      195           200           205
Pro Ser Phe Lys Pro Gly Phe Ala Glu Gln Ser Leu Met Lys Asn Ala
      210           215           220
Ile Lys Thr Ser Glu Glu Ser Trp Ile Glu Gln Gln Met Leu Glu Asp
225           230           235           240
Lys Lys Arg Ala Thr Asp Trp Glu Ala Thr Asn Glu Ala Ile Glu Glu
      245           250           255
Gln Val Ala Arg Glu Ser Tyr Leu Gln Trp Leu Arg Asp Gln Glu Lys
      260           265           270
Gln Ala Arg Gln Val Arg Gly Pro Ser Gln Pro Arg Lys Ala Ser Ala
      275           280           285
Thr Cys Ser Ser Ala Thr Ala Ala Ala Ser Ser Gly Leu Glu Glu Trp
      290           295           300
Thr Ser Arg Ser Pro Arg Gln Arg Ser Ser Ala Ser Ser Pro Glu His
305           310           315           320
Pro Glu Leu His Ala Glu Leu Gly Met Lys Pro Pro Ser Pro Gly Thr
      325           330           335
Val Leu Ala Leu Ala Lys Pro Pro Ser Pro Cys Ala Pro Gly Thr Ser
      340           345           350
Ser Gln Phe Ser Ala Gly Ala Asp Arg Ala Thr Ser Pro Leu Val Ser
      355           360           365
Leu Tyr Pro Ala Leu Glu Cys Arg Ala Leu Ile Gln Gln Met Ser Pro
      370           375           380
Ser Ala Phe Gly Leu Asn Asp Trp Asp Asp Asp Glu Ile Leu Ala Ser

```

```

385          390          395          400
Val Leu Ala Val Ser Gln Gln Glu Tyr Leu Asp Ser Met Lys Lys Asn
          405          410          415
Lys Val His Arg Asp Pro Pro Pro Asp Lys Ser
          420          425

```

<210> 5743
 <211> 550
 <212> DNA
 <213> Homo sapiens

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<400> 5743
nngcgccaga ctcatttgcc ccgcaggtag atcttggggg tctgccagcc cttcgggggc
60
ttccttttagc cccgccttca gccagatgcg cctcaggtct ttctcgaact tgatctgctt
120
gcgtctcagg cgtccctcct ggaccttccc ctatctggct gggcggacac tggtaggatt
180
gcggtggagc cacatgtcct gcggtcccg tatccagtct gggcaggaag cagcggggccg
240
tgagccagct ctccaggggg ctgacggaca tcttctggg gaccagcatc tcctccagct
300
ccagctgggc ccccttgca gggagagagg ccgccctacc tgggcccggcc ggcgatgtgc
360
tgtaaagggg cccgcagacc cggctgccc actccagaga cgggccaagg cgggcccggc
420
ccgaaaggtc ccagaacggg gaggccggcc cctccccgg gttcaccccc gcgcgaatcg
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540
ggcgccctca
550

```

<210> 5744
 <211> 95
 <212> PRT
 <213> Homo sapiens

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<400> 5744
Arg Thr Ser Ser Trp Gly Pro Ala Ser Pro Pro Ala Pro Ala Gly Pro
1          5          10          15
Pro Cys Glu Gly Glu Arg Pro Pro Tyr Leu Gly Arg Pro Ala Met Cys
20          25          30
Cys Lys Gly Ala Arg Arg Pro Gly Cys Pro Thr Pro Glu Thr Gly Gln
35          40          45
Gly Gly Arg Pro Pro Lys Gly Pro Arg Thr Gly Arg Pro Ala Pro Ser
50          55          60
Pro Gly Ser Pro Pro Arg Glu Ser Arg Cys Leu Ala Pro Xaa Asp Pro
65          70          75          80
Leu Gly Trp Thr Pro Gly Pro Pro Ala Ala Pro Gly Ala Leu
85          90          95

```

<210> 5745
 <211> 849

<212> DNA

<213> Homo sapiens

<400> 5745

```

aaagtttttt tttttttctg cttcaggcac acggggaacc acgcgtttta atcaacgtat
60
cgataaaaaa caccagggca cggacactcc aggggaaatg cttattgagt aaagtatccg
120
aggaagtgat gcagggcagg taaacagctg gtgctcagca gcgagaggac gcgtcactct
180
gccgtttctg aggggtgacgc cctccccgta cctcgctgag agccacctgc agacacagca
240
ggccacagca gaatgcacag gtcactgttg taggggaaca aatcgtaatg cccagagaaa
300
acctgatagt gaaatgtaaa cagacaggac aggggtggttc caggtggcca ccaccgccag
360
gcccttcccc tgattgatct gagagcttca cagccggcgg cactgggacc catttccaga
420
aacactggaa caccaggtct ctcagatgcc cgcgggaggg gccccagga ggcctttctc
480
agcatcagct tttgggtgac aaaccata cagcaaaact gtacaaatac acacaacgga
540
ccccagctg acagtgagac caggacccta ggaaggtcag gtggtggtga agtcatcccc
600
tctccaaccg agcagagcct ggggttgggc tctgatgacc tcccgggcaa agtgtccagg
660
tgagggaagc aaactcccaa atggggcaca aaggtataaa aaagcagctg agagattgcg
720
ggatggggtc ggggccactt ggccgacacc ttctgcctcg cctggccggg cggggccagc
780
ctctcgccac aggatggagg gtgactgtgc accctgctcc atgtacagga cgggttgagg
840
gtcccatgg
849

```

<210> 5746

<211> 140

<212> PRT

<213> Homo sapiens

<400> 5746

```

Met Thr Ser Pro Pro Asp Leu Pro Arg Val Leu Val Ser Leu Ser
1          5          10          15
Ala Gly Gly Pro Leu Cys Val Phe Val Gln Phe Cys Cys Met Gly Phe
20          25          30
Val Thr Gln Lys Leu Met Leu Arg Lys Ala Ser Leu Gly Pro Leu Pro
35          40          45
Arg Ala Ser Glu Arg Pro Gly Val Pro Val Phe Leu Glu Met Gly Pro
50          55          60
Ser Ala Ala Gly Cys Glu Ala Leu Arg Ser Ile Thr Gly Arg Ala Trp
65          70          75          80
Arg Trp Trp Pro Pro Gly Thr Thr Leu Ser Cys Leu Phe Thr Phe His
85          90          95
Tyr Gln Val Phe Ser Gly His Tyr Asp Leu Phe Pro Tyr Asn Ser Asp

```


			100					105					110			
Leu	Cys	Ile	Leu	Leu	Trp	Pro	Ala	Val	Ser	Ala	Gly	Gly	Ser	Gln	Arg	
		115					120					125				
Gly	Thr	Gly	Arg	Ala	Ser	Pro	Cys	Arg	Thr	Ala	Glu					
	130					135					140					

```
<210> 5747
<211> 1999
<212> DNA
<213> Homo sapiens
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<400> 5747

ncatggcccc	agtccggcgg	ggaggtcgg	cccgggccc	agacggcgg	gcagatccgc
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gtcgccatcc	aggaggccga	ggacgtggac	gagttggagg	acgaggagga	gggggcggag
120					
actcggggcg	ccggggaccc	ggcccgggtac	ctcagccccg	gctggggcag	cgcgagcgag
180					
gaggagccga	gccgcgggca	cagtggcacc	actgcaagtg	gaggtgagaa	cgagcgtgag
240					
gacctggagc	aggagtggaa	gccccgggat	gaggagtga	tcaagaaact	ggtggatcag
300					
atcgaattct	actttttctga	tgaaaacctg	gagaaggacg	cctttttgct	aaaacacgtg
360					
aggaggaaca	agctgggata	tgtgagcgtt	aagctactca	catccttcaa	aaaggtgaaa
420					
catcttacac	gggactggag	aaccacagca	catgctttga	agtattcagt	ggtccttgag
480					
ttgaatgagg	accaccggaa	ggtgaggagg	accacccccg	tcccactgtt	ccccaacgag
540					
aacctcccca	gcaagatgct	cctgggtctat	gatctctact	tgtctcctaa	gctgtgggct
600					
ctggccaccc	cccagaagaa	tgggaagggtg	caagagaagg	tgatggaaca	cctgctcaag
660					
cttttcggga	cttttgaggt	catctcatca	gtgcggatcc	tcaaacctgg	gagagagctg
720					
ccccctgaca	tccggaggat	cagcagccgc	tacagccaag	tggggaccca	ggagtgtgcc
780					
atcgtggagt	tcgaggaggt	ggaagcagcc	atcaaagccc	atgagttcat	gatcacagaa
840					
tctcagggca	aagagaacat	gaaagctgtc	ctgattggta	tgaagccacc	caaaaagaaa
900					
cctgccaaag	acaaaaatca	tgacgaggag	ccactgcga	gcatccacct	gaacaagtcc
960					
ctgaacaaga	gagtcgagga	gcttcagtac	atgggtgatg	agtcttctgc	caacagctcc
1020					
tctgaccccc	agagcaaccc	cacatcccct	atggcggggc	gacggcacgc	ggccaccaac
1080					
aagctcagcc	cgtctggcca	ccagaatctc	tttctgagtc	caaatgcctc	cccgtgcaca
1140					
agtccttgga	gcagcccctt	ggcccaacgc	aaaggcgttt	ccagaaagtc	cccactggcg
1200					
gaggaaggta	gactgaactg	cagcaccagc	cctgagatct	tccgcaagtg	tatggattat
1260					

tcctctgaca gcagcgtcac tccctctggc agccctctggg tccggaggcg tcgccaagcc
 1320
 gagatgggga cccaggagaa aagccccggt acgagtcctc tgctctcccg gaagatgcag
 1380
 actgcagatg ggctaccogt aggggtgctg aggttgccca ggggtcctga caacaccaga
 1440
 ggatttcatt gccatgagag gagcagggcc tgtgtataaa taccttctat ttttaataca
 1500
 agctccactg aaaaccacct tcgttttcaa ggttctgaca aacacctggc atgacagaat
 1560
 ggaattcggt cccctttgag agatttttta ttcattgata cctcttaatt tatctatctg
 1620
 taatatacat aaatcggtac gccatgggtt gaagaccacc ttctagtcca ggactcctgt
 1680
 tcttcccagc atggccacta ttttgatgat ggctgatgtg tgtgagtgtg atggccctga
 1740
 agggctgtag gacggagggt ccctggggga agtctgttct ttggtatgga atttttctct
 1800
 cttctttggg atggaatttt tcccttcagt gactgagctg tcctcgatag gccatgcaag
 1860
 ggcttctctga gagttcagga aagttctctt gtgcaacagc aagtagctaa gcctatagca
 1920
 tgggtgtctg taggaccaa tcgatgttac ctgtcaagta aataaataat aaaacaccca
 1980
 aaaaaaaaaa aaaaaaaaaa
 1999

<210> 5748

<211> 492

<212> PRT

<213> Homo sapiens

<400> 5748

Xaa	Met	Ala	Gln	Ser	Gly	Gly	Glu	Ala	Arg	Pro	Gly	Pro	Lys	Thr	Ala
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Val	Gln	Ile	Arg	Val	Ala	Ile	Gln	Glu	Ala	Glu	Asp	Val	Asp	Glu	Leu
			20					25					30		
Glu	Asp	Glu	Glu	Glu	Gly	Ala	Glu	Thr	Arg	Gly	Ala	Gly	Asp	Pro	Ala
			35					40					45		
Arg	Tyr	Leu	Ser	Pro	Gly	Trp	Gly	Ser	Ala	Ser	Glu	Glu	Glu	Pro	Ser
			50					55					60		
Arg	Gly	His	Ser	Gly	Thr	Thr	Ala	Ser	Gly	Gly	Glu	Asn	Glu	Arg	Glu
															80
Asp	Leu	Glu	Gln	Glu	Trp	Lys	Pro	Pro	Asp	Glu	Glu	Leu	Ile	Lys	Lys
															95
Leu	Val	Asp	Gln	Ile	Glu	Phe	Tyr	Phe	Ser	Asp	Glu	Asn	Leu	Glu	Lys
															110
Asp	Ala	Phe	Leu	Leu	Lys	His	Val	Arg	Arg	Asn	Lys	Leu	Gly	Tyr	Val
															125
Ser	Val	Lys	Leu	Leu	Thr	Ser	Phe	Lys	Lys	Val	Lys	His	Leu	Thr	Arg
															140
Asp	Trp	Arg	Thr	Thr	Ala	His	Ala	Leu	Lys	Tyr	Ser	Val	Val	Leu	Glu
															160
Leu	Asn	Glu	Asp	His	Arg	Lys	Val	Arg	Arg	Thr	Thr	Pro	Val	Pro	Leu

```

      165              170              175
Phe Pro Asn Glu Asn Leu Pro Ser Lys Met Leu Leu Val Tyr Asp Leu
      180              185              190
Tyr Leu Ser Pro Lys Leu Trp Ala Leu Ala Thr Pro Gln Lys Asn Gly
      195              200              205
Arg Val Gln Glu Lys Val Met Glu His Leu Leu Lys Leu Phe Gly Thr
      210              215              220
Phe Gly Val Ile Ser Ser Val Arg Ile Leu Lys Pro Gly Arg Glu Leu
      225              230              235              240
Pro Pro Asp Ile Arg Arg Ile Ser Ser Arg Tyr Ser Gln Val Gly Thr
      245              250              255
Gln Glu Cys Ala Ile Val Glu Phe Glu Glu Val Glu Ala Ala Ile Lys
      260              265              270
Ala His Glu Phe Met Ile Thr Glu Ser Gln Gly Lys Glu Asn Met Lys
      275              280              285
Ala Val Leu Ile Gly Met Lys Pro Pro Lys Lys Lys Pro Ala Lys Asp
      290              295              300
Lys Asn His Asp Glu Glu Pro Thr Ala Ser Ile His Leu Asn Lys Ser
      305              310              315              320
Leu Asn Lys Arg Val Glu Glu Leu Gln Tyr Met Gly Asp Glu Ser Ser
      325              330              335
Ala Asn Ser Ser Ser Asp Pro Glu Ser Asn Pro Thr Ser Pro Met Ala
      340              345              350
Gly Arg Arg His Ala Ala Thr Asn Lys Leu Ser Pro Ser Gly His Gln
      355              360              365
Asn Leu Phe Leu Ser Pro Asn Ala Ser Pro Cys Thr Ser Pro Trp Ser
      370              375              380
Ser Pro Leu Ala Gln Arg Lys Gly Val Ser Arg Lys Ser Pro Leu Ala
      385              390              395              400
Glu Glu Gly Arg Leu Asn Cys Ser Thr Ser Pro Glu Ile Phe Arg Lys
      405              410              415
Cys Met Asp Tyr Ser Ser Asp Ser Ser Val Thr Pro Ser Gly Ser Pro
      420              425              430
Trp Val Arg Arg Arg Arg Gln Ala Glu Met Gly Thr Gln Glu Lys Ser
      435              440              445
Pro Gly Thr Ser Pro Leu Leu Ser Arg Lys Met Gln Thr Ala Asp Gly
      450              455              460
Leu Pro Val Gly Val Leu Arg Leu Pro Arg Gly Pro Asp Asn Thr Arg
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<211> 2849

<212> DNA

<213> Homo sapiens

<400> 5749

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<211> 522

<212> PRT

<213> Homo sapiens

<400> 5750

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<211> 221

<212> PRT

<213> Homo sapiens

<400> 5754

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<211> 1513

<212> DNA

<213> Homo sapiens

<400> 5755

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600

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<210> 5756

<211> 415

<212> PRT

<213> Homo sapiens

<400> 5756

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			20					25					30		
Ala	Ala	Leu	Leu	Ala	Gln	Asp	Tyr	Cys	Asp	Ala	Ile	Asp	Leu	Asn	Leu
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	50					55					60				
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Lys	Leu	Ser	Val	Pro	Val	Thr	Cys	Lys	Ile	Arg	Val	Phe	Pro	Glu	Ile
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Asp	Lys	Thr	Val	Arg	Tyr	Ala	Gln	Met	Leu	Glu	Lys	Ala	Gly	Cys	Gln
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Leu	Leu	Thr	Val	His	Gly	Arg	Thr	Lys	Glu	Gln	Lys	Gly	Pro	Leu	Ser

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Arg Cys Leu Arg Asp Thr Gly Val Gln Gly Val Met Ser Ala Glu Gly
      165      170      175
Asn Leu His Asn Pro Ala Leu Phe Glu Gly Arg Ser Pro Ala Val Trp
      180      185      190
Glu Leu Ala Glu Glu Tyr Leu Asp Ile Val Arg Glu His Pro Cys Pro
      195      200      205
Leu Ser Tyr Val Arg Ala His Leu Phe Lys Leu Trp His His Thr Leu
      210      215      220
Gln Val His Gln Glu Leu Arg Glu Glu Leu Ala Lys Val Lys Thr Leu
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Glu Gly Ile Ala Ala Val Ser Gln Glu Leu Lys Leu Arg Cys Gln Glu
      245      250      255
Glu Ile Ser Arg Gln Glu Gly Ala Lys Pro Thr Gly Asp Leu Pro Phe
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His Trp Ile Cys Gln Pro Tyr Ile Arg Pro Gly Pro Arg Glu Gly Ser
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Lys Glu Lys Ala Gly Ala Arg Ser Lys Arg Ala Leu Glu Glu Glu Glu
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Gly Gly Thr Glu Val Leu Ser Lys Asn Lys Gln Lys Lys Gln Leu Arg
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Cys Asp Gln Cys Gly Asn Pro Lys Gly Asn Arg Cys Val Phe Ser Leu
      340      345      350
Cys Arg Gly Cys Cys Lys Lys Arg Ala Ser Lys Glu Thr Ala Asp Cys
      355      360      365
Pro Gly His Gly Leu Leu Phe Lys Thr Lys Leu Glu Lys Ser Leu Ala
      370      375      380
Trp Lys Glu Ala Gln Pro Glu Leu Gln Glu Pro Gln Pro Ala Ala Pro
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<210> 5757

<211> 2362

<212> DNA

<213> Homo sapiens

<400> 5757

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120

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180

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240

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300

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420
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<210> 5758

<211> 440

<212> PRT

<213> Homo sapiens

<400> 5758

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			20					25					30		
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		35					40					45			
Phe	Ala	Trp	Glu	Ser	Ala	Asp	Ser	Gly	Leu	Glu	Val	Cys	Pro	Glu	Asp
	50					55					60				
Ile	Tyr	Gly	Val	Gln	Glu	Val	His	Val	Asn	Gly	Ala	Val	Val	Leu	Ala
65					70					75				80	
Phe	Glu	Leu	Tyr	Tyr	His	Thr	Thr	Gln	Asp	Leu	Gln	Leu	Phe	Arg	Glu
				85					90					95	
Gly	Gly	Gly	Trp	Glu	Val	Val	Arg	Ala	Val	Ala	Lys	Phe	Trp	Cys	Ser
			100					105					110		
Arg	Val	Glu	Trp	Ser	Pro	Arg	Glu	Glu	Lys	Tyr	His	Leu	Arg	Gly	Val
			115				120					125			
Met	Ser	Pro	Asp	Glu	Tyr	His	Ser	Gly	Val	Asn	Asn	Ser	Val	Tyr	Thr
	130					135					140				
Asn	Val	Leu	Val	Gln	Asn	Ser	Leu	Arg	Phe	Ala	Ala	Ala	Leu	Ala	Gln
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Asp	Leu	Gly	Leu	Pro	Ile	Pro	Ser	Gln	Trp	Leu	Ala	Val	Ala	Asp	Lys
				165					170					175	
Ile	Lys	Val	Pro	Phe	Asp	Val	Glu	Gln	Asn	Phe	His	Pro	Glu	Phe	Asp
			180						185				190		
Gly	Tyr	Glu	Pro	Gly	Glu	Val	Val	Lys	Gln	Ala	Asp	Val	Val	Leu	Leu
		195					200					205			
Gly	Tyr	Pro	Val	Pro	Phe	Ser	Leu	Ser	Pro	Asp	Val	Arg	Arg	Lys	Asn
	210					215					220				
Leu	Glu	Ile	Tyr	Glu	Ala	Val	Thr	Ser	Pro	Gln	Gly	Pro	Ala	Met	Thr
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<210> 5759
<211> 1333
<212> DNA
<213> Homo sapiens
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4921

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 780
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 840
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 900
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 960
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 1020
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<210> 5760

<211> 273

<212> PRT

<213> Homo sapiens

<400> 5760

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Ser	Gly	Lys	Ala	Gly	Ala	Ala	Asn	Gly	Phe	Leu	Met	Glu	Val	Cys	Val
			20					25					30		
Asp	Ser	Val	Glu	Ser	Ala	Val	Asn	Ala	Glu	Arg	Gly	Gly	Ala	Asp	Arg
			35				40					45			
Ile	Glu	Leu	Cys	Ser	Gly	Leu	Ser	Glu	Gly	Gly	Thr	Thr	Pro	Ser	Met
			50			55					60				
Gly	Val	Leu	Gln	Val	Val	Lys	Gln	Ser	Val	Gln	Ile	Pro	Val	Phe	Val
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Met	Ile	Arg	Pro	Arg	Gly	Gly	Asp	Phe	Leu	Tyr	Ser	Asp	Arg	Glu	Ile
				85				90					95		
Glu	Val	Met	Lys	Ala	Asp	Ile	Arg	Leu	Ala	Lys	Leu	Tyr	Gly	Ala	Asp
			100					105					110		
Gly	Leu	Val	Phe	Gly	Ala	Leu	Thr	Glu	Asp	Gly	His	Ile	Asp	Lys	Glu
			115				120					125			
Leu	Cys	Met	Ser	Leu	Met	Ala	Ile	Cys	Arg	Pro	Leu	Pro	Val	Thr	Phe
			130			135					140				
His	Arg	Ala	Phe	Asp	Met	Val	His	Asp	Pro	Met	Ala	Ala	Leu	Glu	Thr
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Leu	Leu	Thr	Leu	Gly	Phe	Glu	Arg	Val	Leu	Thr	Ser	Gly	Cys	Asp	Ser
			165					170					175		
Ser	Ala	Leu	Glu	Gly	Leu	Pro	Leu	Ile	Lys	Arg	Leu	Ile	Glu	Gln	Ala

	180		185		190
Lys	Gly	Arg	Ile	Val	Val
	195		200		205
Leu	Gln	Arg	Ile	Leu	Glu
	210		215		220
Ala	Arg	Ser	Thr	Arg	Asp
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Ala	Met	Gly	Ala	Ser	Leu
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<210> 5761

<211> 1452

<212> DNA

<213> Homo sapiens

<400> 5761

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1452

<210> 5762

<211> 333

<212> PRT

<213> Homo sapiens

<400> 5762

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			20					25					30		
Glu	Asn	Ala	Gln	Pro	Thr	Glu	Gly	Glu	Arg	Glu	Ile	Trp	Asn	Gln	Ile
		35					40					45			
Ser	Ala	Val	Leu	Gln	Asp	Ser	Glu	Ser	Ile	Leu	Ala	Asp	Leu	Gln	Ala
	50					55					60				
Tyr	Lys	Gly	Ala	Gly	Pro	Glu	Ile	Arg	Asp	Ala	Ile	Gln	Asn	Pro	Asn
65					70				75					80	
Asp	Ile	Gln	Leu	Gln	Glu	Lys	Ala	Trp	Asn	Ala	Val	Cys	Pro	Leu	Val
				85					90					95	
Val	Arg	Leu	Lys	Arg	Phe	Tyr	Glu	Phe	Ser	Ile	Arg	Leu	Glu	Lys	Ala
			100					105					110		
Leu	Gln	Ser	Leu	Leu	Glu	Ser	Leu	Thr	Cys	Pro	Pro	Tyr	Thr	Pro	Thr
		115					120					125			
Gln	His	Leu	Glu	Arg	Glu	Gln	Ala	Leu	Ala	Lys	Glu	Phe	Ala	Glu	Ile
		130				135					140				
Leu	His	Phe	Thr	Leu	Arg	Phe	Asp	Glu	Leu	Lys	Met	Arg	Asn	Pro	Ala
145					150					155					160
Ile	Gln	Asn	Asp	Phe	Ser	Tyr	Tyr	Arg	Arg	Thr	Ile	Ser	Arg	Asn	Arg
				165					170					175	
Ile	Asn	Asn	Met	His	Leu	Asp	Ile	Glu	Asn	Glu	Val	Asn	Asn	Glu	Met
			180					185					190		
Ala	Asn	Arg	Met	Ser	Leu	Phe	Tyr	Ala	Glu	Ala	Thr	Pro	Met	Leu	Lys
		195					200					205			
Thr	Leu	Ser	Asn	Ala	Thr	Met	His	Phe	Val	Ser	Glu	Asn	Lys	Thr	Leu
	210					215					220				
Pro	Ile	Glu	Asn	Thr	Thr	Asp	Cys	Leu	Ser	Thr	Met	Thr	Ser	Val	Cys
225					230					235					240
Lys	Val	Met	Leu	Glu	Thr	Pro	Glu	Tyr	Arg	Ser	Arg	Phe	Thr	Ser	Glu

					245					250					255	
Glu	Thr	Leu	Met	Phe	Cys	Met	Arg	Val	Met	Val	Gly	Val	Ile	Ile	Leu	
			260					265						270		
Tyr	Asp	His	Val	His	Pro	Val	Gly	Ala	Phe	Cys	Lys	Thr	Ser	Lys	Ile	
		275					280						285			
Asp	Met	Lys	Gly	Cys	Ile	Lys	Val	Leu	Lys	Glu	Gln	Ala	Pro	Asp	Ser	
	290					295					300					
Val	Glu	Gly	Leu	Leu	Asn	Ala	Leu	Arg	Phe	Thr	Thr	Lys	His	Leu	Asn	
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<210> 5763

<211> 3840

<212> DNA

<213> Homo sapiens

<400> 5763

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180	ttagaaaata	tgccatcggc	tgaagccaaa	ctaaaaaaga	atagatgtgc
240	gactgtcctg	gctgcatgca	cacctctctc	actcggggca	cgagcatctc
300	ccagatgacc	cagccaagac	caccatgaag	aaagcctatt	acctggcatg
360	cgctggacgt	ctagagatgt	gggcatggca	gacaaatctg	tagctagtgg
420	gaacctgaaa	atcctcacac	acaacgggatg	aacaaattga	ttgaatatta
480	gctcagaaag	agaaggttga	gcgagatcgc	aagaaaactgg	cacgacgtag
540	cctctggctt	tttcggacaa	atatggtctt	ggaaccaggc	ttcagcgacc
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<211> 466

<212> PRT

<213> Homo sapiens

<400> 5764

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<211> 3220

<212> DNA

<213> Homo sapiens

<400> 5765

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<210> 5766

<211> 873

<212> PRT

<213> Homo sapiens

<400> 5766

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<212> DNA

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<210> 5768

<211> 360

<212> PRT

<213> Homo sapiens

<400> 5768

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Phe	Thr	Pro	Glu	Leu	Glu	Ser	Ile	Ile	Pro	Val	Pro	Ser	Asn	Lys	Thr
		20						25					30		
Thr	Cys	Glu	Asn	Trp	Arg	Glu	Ile	His	His	Leu	Val	Phe	His	Val	Ala
	35					40						45			
Asn	Ile	Cys	Phe	Ala	Val	Gly	Leu	Val	Ile	Pro	Thr	Thr	Leu	His	Leu
	50					55					60				
His	Met	Ile	Phe	Leu	Arg	Gly	Met	Leu	Thr	Leu	Gly	Cys	Thr	Leu	Tyr
65				70					75					80	
Ile	Val	Trp	Ala	Thr	Leu	Tyr	Arg	Cys	Ala	Leu	Asp	Ile	Met	Ile	Trp
				85					90					95	
Asn	Ser	Val	Phe	Leu	Gly	Val	Asn	Ile	Leu	His	Leu	Ser	Tyr	Leu	Leu
		100						105					110		
Tyr	Lys	Lys	Arg	Pro	Val	Lys	Ile	Glu	Lys	Glu	Leu	Ser	Gly	Met	Tyr
	115					120						125			
Arg	Arg	Leu	Phe	Glu	Pro	Leu	Arg	Val	Pro	Pro	Asp	Leu	Phe	Arg	Arg

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Tyr Ala Ala Glu Asp Lys Thr Ser Val Asp Arg Leu Ser Ile Leu		160
	165	170
Leu Lys Gly Lys Met Lys Val Ser Tyr Arg Gly His Phe Leu His Asn		175
	180	185
Ile Tyr Pro Cys Ala Phe Ile Asp Ser Pro Glu Phe Arg Ser Thr Gln		190
	195	200
Met His Lys Gly Glu Lys Phe Gln Val Thr Ile Ile Ala Asp Asp Asn		205
	210	215
Cys Arg Phe Leu Cys Trp Ser Arg Glu Arg Leu Thr Tyr Phe Leu Glu		220
225	230	235
Ser Glu Pro Phe Leu Tyr Glu Ile Phe Arg Tyr Leu Ile Gly Lys Asp		240
	245	250
Ile Thr Asn Lys Leu Tyr Ser Leu Asn Asp Pro Thr Leu Asn Asp Lys		255
	260	265
Lys Ala Lys Lys Leu Glu His Gln Leu Ser Leu Cys Thr Gln Ile Ser		270
	275	280
Met Leu Glu Met Arg Asn Ser Ile Ala Ser Ser Ser Asp Ser Asp Asp		285
	290	295
Gly Leu His Gln Phe Leu Arg Ser Thr Ser Ser Met Ser Ser Leu His		300
305	310	315
Val Ser Ser Pro His Gln Arg Ala Ser Ala Lys Met Lys Pro Ile Glu		320
	325	330
Glu Gly Ala Glu Asp Asp Asp Val Phe Glu Pro Ala Ser Pro Asn		335
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Thr Leu Lys Val His Gln Leu Pro		350
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<210> 5769

<211> 427

<212> DNA

<213> Homo sapiens

<400> 5769

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180gtaaaggaga gcaaattgag ttcttcaatg aatagcatca agatcttctg gggcccagag
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300cagtacagag ttgtacaaga ggaaaaccag gtaagttcta cgtgtgttta cctttattgg
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cacgcgt

427

<210> 5770

<211> 85

<212> PRT

<213> Homo sapiens

<400> 5770

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Lys Asp Val Glu Val Lys Glu Ser Lys Leu Ser Ser Ser Met Asn Ser
          20           25           30
Ile Lys Ile Phe Trp Gly Pro Glu Leu Lys Lys Glu Arg Ala Leu Arg
          35           40           45
Lys Asp Glu Ala Ser Lys Ile Pro Ile Trp Lys Glu Gln Tyr Arg Val
          50           55           60
Val Gln Glu Glu Asn Gln Val Ser Ser Thr Cys Val Tyr Leu Tyr Trp
65           70           75           80
Leu Asn Ser Cys Ile
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<210> 5771

<211> 2539

<212> DNA

<213> Homo sapiens

<400> 5771

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420
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480
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780
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900

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2539

<210> 5772

<211> 642

<212> PRT

<213> Homo sapiens

<400> 5772

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Cys	Leu	Ala	Asn	Gly	Ser	Trp	Ser	Gly	Ala	Thr	Pro	Asp	Cys	Val	Pro
			20					25					30		
Val	Arg	Cys	Ala	Thr	Pro	Pro	Gln	Leu	Ala	Asn	Gly	Val	Thr	Glu	Gly
			35				40					45			
Leu	Asp	Tyr	Gly	Phe	Met	Lys	Glu	Val	Thr	Phe	His	Cys	His	Gly	Leu
			50			55					60				
His	Leu	Ala	Arg	Cys	Ser	Lys	Thr	His	Leu	Ser	Val	Arg	Gly	Asn	Trp
65					70					75				80	
Asp	Ala	Glu	Ile	Pro	Leu	Cys	Lys	Pro	Val	Asn	Cys	Gly	Pro	Pro	Glu
				85				90						95	
Asp	Leu	Ala	His	Gly	Phe	Pro	Asn	Gly	Phe	Ser	Phe	Ile	His	Gly	Gly
			100				105						110		
His	Ile	Gln	Tyr	Gln	Cys	Phe	Pro	Gly	Tyr	Lys	Leu	His	Gly	Asn	Ser
		115					120					125			
Ser	Arg	Arg	Cys	Leu	Ser	Asn	Gly	Ser	Trp	Ser	Gly	Ser	Ser	Pro	Ser
		130				135					140				
Cys	Leu	Pro	Cys	Arg	Cys	Ser	Thr	Pro	Val	Ile	Glu	Tyr	Gly	Thr	Val
145					150					155				160	
Asn	Gly	Thr	Asp	Phe	Asp	Cys	Gly	Lys	Ala	Ala	Arg	Ile	Gln	Cys	Phe
				165					170					175	
Lys	Gly	Phe	Lys	Leu	Leu	Gly	Leu	Ser	Glu	Ile	Thr	Cys	Glu	Ala	Asp
			180				185						190		
Gly	Gln	Trp	Ser	Ser	Gly	Phe	Pro	His	Cys	Glu	His	Thr	Ser	Cys	Gly
		195					200					205			
Ser	Leu	Pro	Met	Ile	Pro	Asn	Ala	Phe	Ile	Ser	Glu	Thr	Ser	Ser	Trp
		210				215					220				
Lys	Glu	Asn	Val	Ile	Thr	Tyr	Ser	Cys	Arg	Ser	Gly	Tyr	Val	Ile	Gln
225					230					235				240	
Gly	Ser	Ser	Asp	Leu	Ile	Cys	Thr	Glu	Lys	Gly	Val	Trp	Asn	Gln	Pro
				245					250					255	
Tyr	Pro	Val	Cys	Glu	Pro	Leu	Ser	Cys	Gly	Ser	Pro	Pro	Ser	Val	Ala
			260					265					270		
Asn	Ala	Val	Ala	Thr	Gly	Glu	Ala	His	Thr	Tyr	Glu	Ser	Glu	Val	Lys
		275					280					285			
Leu	Arg	Cys	Leu	Glu	Gly	Tyr	Thr	Met	Asp	Thr	Asp	Thr	Asp	Thr	Ile
		290				295					300				
Thr	Cys	Gln	Lys	Asp	Gly	Arg	Trp	Phe	Pro	Glu	Arg	Ile	Ser	Cys	Ser
305					310					315				320	
Pro	Lys	Lys	Cys	Pro	Leu	Pro	Glu	Asn	Ile	Thr	His	Ile	Leu	Val	His
				325				330					335		
Gly	Asp	Asp	Phe	Ser	Val	Asn	Arg	Gln	Val	Ser	Val	Ser	Cys	Ala	Glu
			340					345					350		
Gly	Tyr	Thr	Phe	Glu	Gly	Val	Asn	Ile	Ser	Val	Cys	Gln	Leu	Asp	Gly

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370              375              380
Gly Lys Pro Glu Ser Pro Glu His Gly Phe Val Val Gly Ser Lys Tyr
385              390              395              400
Thr Phe Glu Ser Thr Ile Ile Tyr Gln Cys Glu Pro Gly Tyr Glu Leu
      405              410              415
Glu Gly Asn Arg Glu Arg Val Cys Gln Glu Asn Arg Gln Trp Ser Gly
      420              425              430
Gly Val Ala Ile Cys Lys Glu Thr Arg Cys Glu Thr Pro Leu Glu Phe
      435              440              445
Leu Asn Gly Lys Ala Asp Ile Glu Asn Arg Thr Thr Gly Pro Asn Val
      450              455              460
Val Tyr Ser Cys Asn Arg Gly Tyr Ser Leu Glu Gly Pro Ser Glu Ala
465              470              475              480
His Cys Thr Glu Asn Gly Thr Trp Ser His Pro Val Pro Leu Cys Lys
      485              490              495
Pro Asn Pro Cys Pro Val Pro Phe Val Ile Pro Glu Asn Ala Leu Leu
      500              505              510
Ser Glu Lys Glu Phe Tyr Val Asp Gln Asn Val Ser Ile Lys Cys Arg
      515              520              525
Glu Gly Phe Leu Leu Gln Gly His Gly Ile Ile Thr Cys Asn Pro Asp
      530              535              540
Glu Thr Trp Thr Gln Thr Ser Ala Lys Cys Glu Lys Ile Ser Cys Gly
545              550              555              560
Pro Pro Ala His Val Glu Asn Ala Ile Ala Arg Gly Val His Tyr Gln
      565              570              575
Tyr Gly Asp Met Ile Thr Tyr Ser Cys Tyr Ser Gly Tyr Met Leu Glu
      580              585              590
Gly Phe Leu Arg Ser Val Cys Leu Glu Asn Gly Thr Trp Thr Ser Pro
      595              600              605
Pro Ile Cys Arg Ala Val Cys Arg Phe Pro Cys Gln Asn Gly Gly His
      610              615              620
Leu Pro Thr Pro Lys Cys Leu Phe Leu Ser Arg Gly Leu Asp Gly Ala
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Pro Leu

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<210> 5773

<211> 579

<212> DNA

<213> Homo sapiens

<400> 5773

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120
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180
gaaagtaaac ggaaccggcg gcgggagtcg cggtcccgtt cgcgctccac caacacggcc
240
gtgtcccggc gcgagcggga ccgggagcgc cctcgtcccc gcccgaccgc atcgacatct
300

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tcgggcgac ggtgagcaag cgcagcagcc tggacgagaa gcagaagcga gaggaggagg
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 420
 tcatcgagga agaaacagca cgaagagtag aagaattggt agcaanaaag ggtggaggaa
 480
 gaactggaga aaaggaagga tgaaattgaa cgagaagtcc tccgaagggt ggaggaagcc
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<210> 5774

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5774

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			20				25						30		
Ser	Ser	Lys	His	Asn	Lys	Lys	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg
		35				40					45				
Asp	Lys	Glu	Arg	Val	Arg	Lys	Arg	Ser	Lys	Ser	Arg	Glu	Ser	Lys	Arg
	50					55					60				
Asn	Arg	Arg	Arg	Glu	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Thr	Asn	Thr	Ala
65				70				75						80	
Val	Ser	Arg	Arg	Glu	Arg	Asp	Arg	Glu	Arg	Pro	Arg	Pro	Arg	Pro	Thr
			85					90						95	
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<210> 5775

<211> 1441

<212> DNA

<213> Homo sapiens

<400> 5775

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 480

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<210> 5776

<211> 359

<212> PRT

<213> Homo sapiens

<400> 5776

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		20						25					30		
Asp	Ser	Glu	Pro	Lys	Pro	Glu	Gln	Ala	Pro	Arg	Ser	Pro	Gly	Ser	Gln
		35					40					45			
Ala	Pro	Asp	Glu	Gly	Ala	Gly	Gly	Ala	Leu	Arg	Thr	Ser	Val	Arg	Ser
	50					55				60					
Leu	Pro	Arg	Arg	Ala	Arg	Cys	Ser	Ala	Gly	Phe	Gly	Pro	Glu	Ser	Ser
65				70					75					80	
Ala	Glu	Arg	Pro	Ala	Gly	Gln	Pro	Pro	Gly	Ala	Val	Pro	Cys	Ala	Gln
			85					90						95	
Pro	Arg	Gly	Ala	Trp	Arg	Val	Thr	Leu	Val	Gln	Gln	Ala	Ala	Ala	Gly

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      130      135      140
Ala Cys Gly Lys Ser Phe Lys Tyr Asn Ser Leu Leu Leu Lys His Gln
      145      150      155      160
Arg Ile His Thr Gly Glu Lys Pro Tyr Ala Cys His Glu Cys Gly Lys
      165      170      175
Cys Phe Ala Ala Ala Ser Arg Phe Ile Gln His Gln Arg Ile His Ser
      180      185      190
Gly Glu Lys Pro Tyr Ala Cys Pro Glu Cys Ser Lys Thr Phe Thr Arg
      195      200      205
Ser Ser Asn Leu Ile Lys His Gln Val Ile His Ser Gly Glu Arg Pro
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Phe Ala Cys Gly Asp Cys Gly Lys Leu Phe Arg Arg Ser Phe Ala Leu
      225      230      235      240
Leu Glu His Ala Arg Val His Ser Gly Glu Lys Pro Tyr Glu Cys Ser
      245      250      255
Asp Cys Gly Lys Cys Phe Arg Gly Arg Ser His Phe Phe Arg His Asn
      260      265      270
Arg Thr His Thr Gly Glu Lys Pro Tyr His Cys Leu Asp Cys Gly Lys
      275      280      285
Ser Phe Ser His Ser Ser His Leu Ile Lys His Gln Arg Thr His Arg
      290      295      300
Gly Val Arg Pro Tyr Ala Cys Pro Leu Cys Gly Lys Ser Phe Ser Arg
      305      310      315      320
Arg Ser Asn Leu His Arg His Glu Lys Ile His Thr Thr Gly Pro Lys
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<210> 5777

<211> 1431

<212> DNA

<213> Homo sapiens

<400> 5777

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420

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 720
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 780
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 840
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 900
 caggatccgc cggaactgga ggaagtcagg cccacaagc tacctccacc agatcagaca
 960
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 1020
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 1080
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 1200
 ccagtctaac actattcttg ggctgcatga tattccctg ggagcaaagt gacaggcact
 1260
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 1320
 ggttcagca gcctgttcca cacccccaca ccatacaggat agcacaggga aactgtagtt
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<210> 5778

<211> 164

<212> PRT

<213> Homo sapiens

<400> 5778

Met	Leu	Thr	Leu	Lys	Gly	Ser	Ser	Asp	Arg	Pro	Gln	Met	Gly	Met	Gly
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Gln	Ala	Lys	Met	Arg	Pro	Leu	Gln	Pro	Leu	Pro	Gln	Pro	Ser	Glu	Arg
		20						25				30			
Ala	Gly	Ala	Ala	Leu	Gly	Phe	Leu	Leu	Arg	Arg	Cys	Leu	Gln	Gly	Pro
		35					40				45				
Val	Gly	Asp	His	Gly	Gln	His	Lys	Ser	Met	Ala	Glu	Gly	Ile	Leu	Ala
	50					55				60					
Glu	Val	Leu	Arg	Arg	His	Leu	Gln	His	Glu	Glu	Ala	Pro	Gly	Leu	Arg
65				70					75					80	
Arg	Gly	Arg	Phe	Ala	Glu	Arg	Arg	Gly	Pro	Lys	Trp	Ile	Trp	Arg	Ser
			85					90					95		
Arg	Pro	Ala	Gly	Thr	Pro	Ala	Leu	Thr	Val	Ala	Leu	Arg	Leu	Pro	Pro

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          100          105          110
Gln Arg Arg Ala Gly Pro Pro Thr Tyr Val Pro Gly Cys Leu Arg Gln
          115          120          125
Ala Ala Arg Ser Pro Lys Leu Val Arg Ala Thr Trp Val Thr Ala Ala
          130          135          140
Val Pro Gly Arg Lys Arg Ser Leu Ala Pro Glu Gln Pro Ile Leu Gly
145          150          155          160
Pro Ser Gln Val

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<210> 5779
 <211> 371
 <212> DNA
 <213> Homo sapiens

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<400> 5779
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gcacacggga atgtgtgcgg gtgtgtgtgc gtgcatgcag ctgtgtgtgg atgtgcantc
180
gtgtgtgggt gtgtaggtgt gtgtgggtgt gtgcaccagt gcagggtgtgc atgggtgtgt
240
acaggtgggt gtgtgtatgt gtgtgggggt gtgcccatct gtgcagggtgt gtgggtgtgc
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360
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371

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<210> 5780
 <211> 123
 <212> PRT
 <213> Homo sapiens

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<400> 5780
Leu Leu Arg Arg Val Glu Gly Arg Lys Gly Arg Thr His Asp Leu Pro
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Gln Arg His Gly Arg Glu Arg Gly Val Ile Ser Ala Leu Ser Gly Ile
20     25     30
Pro Cys Val Cys Xaa Arg Val Cys Ala His Gly Asn Val Cys Gly Cys
35     40     45
Val Cys Val His Ala Ala Val Cys Gly Cys Ala Xaa Val Cys Gly Cys
50     55     60
Val Gly Val Cys Gly Cys Val His Gln Cys Arg Cys Ala Trp Val Cys
65     70     75     80
Thr Gly Gly Cys Val Tyr Val Cys Gly Gly Val Pro Ile Cys Ala Gly
85     90     95
Val Trp Val Cys Arg Val Xaa Cys Leu Cys Val Gly Val Xaa Pro Cys
100    105    110
Val Pro Leu Trp Arg Cys Val Gly Val Cys Ser
115    120

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<210> 5781
 <211> 845
 <212> DNA
 <213> Homo sapiens

<400> 5781
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 120
 ccaccaggtg aggatggcac tgcaacatct tccactgagg ctccagctgc cctctcaggt
 180
 acatcagggc ctggancgtc ctctcctcca ggagggccag gactcggccc cctgccagcc
 240
 cccgaagcat tgcagccagg agtgcagcgt gggggccctg caggccatgg ccaggcccca
 300
 gcgccaccag caccaggtca ggctggaagc cataggccag gggcagcacc aagcccaaga
 360
 tgcagctcag gaaaccaccg gtcactactg gcagtggcgt ggagacatgg aacatggata
 420
 gggcagccgc ctcttggccc ctgatgttca gccacagact cctcccgtca tgggcgaggt
 480
 ctggaggccg gtccagctgt cccagggccca cgcacagcag cctggaagaa gagctggcct
 540
 caggacaggt gttcatgttg tccagagtcc attcccagaa ctctctgtgc ttggccagcc
 600
 aggatagggg tgcccacagg tcctgccgtc agaggctcag gatggccaag tgaggcttac
 660
 ctctgggctc cgtgggacag gcctctccga acagccacat ccagggtggc tgctgcagca
 720
 gaggctggag tggctgctat accactgttc acctgtggga tgaataaaca gtggagaatg
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 845

<210> 5782
 <211> 147
 <212> PRT
 <213> Homo sapiens

<400> 5782
 Gly Val Pro Cys Pro Lys Ile Glu Gly Ala Val Gly Leu Gly Ser Gly
 1 5 10 15
 Ser Arg Pro Arg Gly Ala Gly Val Arg Cys His Phe Cys Gly Val Asn
 20 25 30
 Ala Pro Thr Leu Ala Asp Phe Lys Pro Pro Gly Glu Asp Gly Thr Ala
 35 40 45
 Thr Ser Ser Thr Glu Ala Pro Ala Ala Leu Ser Gly Thr Ser Gly Pro
 50 55 60
 Gly Xaa Ser Ser Pro Pro Gly Gly Pro Gly Leu Gly Pro Leu Pro Ala
 65 70 75 80
 Pro Glu Ala Leu Gln Pro Gly Val Gln Arg Gly Gly Pro Ala Gly His

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<400> 5783
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120
gctgggactc tccttcttag tacacaccga ctgatttggg gagatcagaa aaatcatgag
180
tgttgcatgg ccattctcct ttcccaaatt gtgttcattg aagaacaggc ggctggaatt
240
gggaagagtg caaaaatagt ggttcatctt caccagctc ctctaacaa agaacctggc
300
ccattccaga gtagtaagaa ctctacatc aaactctcct tcaaagaaca tggccagatt
360
gagttttaca ggcgtttatc agaggaaatg acacaaagaa gatgggagaa tatgccagtt
420
tcccagtcac taaaaacaaa tagaggacc cagccaggaa gaataagggc tgtaggaatt
480
gtaggtattg aaaggaaact ggaagaaaaa agaaaagaaa ctgacaaaaa cttttctgag
540
gcctttgaag acctcagcaa actaatgac aaggctaagg aaatggtgga attatcaaaa
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tcaattgcta ataaaattaa agacaaacaa ggtgacatca cagaagatga gaccatcagg
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720
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900
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960
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1140

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 1260
 attgagaatt tattggaact tcacagtgc atgtaaatct cttttaattt ctccccaat
 1320
 atgggtccagg aaattttatt agtatacgca taggaaaatt cagaaaagt aatgccaata
 1380
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 1440
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 1500
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 1560
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 1620
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 1680
 aaaaatgaaa taattttatt tgacacatta tttatatata ttctatctag gtttctcttt
 1740
 gtttttttta aagtgatgat ttcattggact gggcatttaa aagaaatggc aactgtggtc
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<210> 5784

<211> 386

<212> PRT

<213> Homo sapiens

<400> 5784

Met	Asp	Arg	Phe	Val	Trp	Thr	Ser	Gly	Leu	Leu	Glu	Ile	Asn	Glu	Thr
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Leu	Val	Ile	Gln	Gln	Arg	Gly	Val	Arg	Ile	Tyr	Asp	Gly	Glu	Glu	Lys
		20				25						30			
Ile	Lys	Phe	Asp	Ala	Gly	Thr	Leu	Leu	Ser	Thr	His	Arg	Leu	Ile	
	35					40					45				
Trp	Arg	Asp	Gln	Lys	Asn	His	Glu	Cys	Cys	Met	Ala	Ile	Leu	Leu	Ser
	50				55					60					
Gln	Ile	Val	Phe	Ile	Glu	Glu	Gln	Ala	Ala	Gly	Ile	Gly	Lys	Ser	Ala
65				70					75					80	
Lys	Ile	Val	Val	His	Leu	His	Pro	Ala	Pro	Pro	Asn	Lys	Glu	Pro	Gly
			85					90					95		
Pro	Phe	Gln	Ser	Ser	Lys	Asn	Ser	Tyr	Ile	Lys	Leu	Ser	Phe	Lys	Glu
		100					105						110		
His	Gly	Gln	Ile	Glu	Phe	Tyr	Arg	Arg	Leu	Ser	Glu	Glu	Met	Thr	Gln
	115					120					125				
Arg	Arg	Trp	Glu	Asn	Met	Pro	Val	Ser	Gln	Ser	Leu	Gln	Thr	Asn	Arg
	130				135					140					
Gly	Pro	Gln	Pro	Gly	Arg	Ile	Arg	Ala	Val	Gly	Ile	Val	Gly	Ile	Glu
145				150					155					160	
Arg	Lys	Leu	Glu	Glu	Lys	Arg	Lys	Glu	Thr	Asp	Lys	Asn	Ile	Ser	Glu
			165					170					175		
Ala	Phe	Glu	Asp	Leu	Ser	Lys	Leu	Met	Ile	Lys	Ala	Lys	Glu	Met	Val

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<210> 5785
<211> 785
<212> DNA
<213> Homo sapiens
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<400> 5785
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120
ccttggccat ggcagcttgg ttgggacagc cgggccaaagg gaaaaaaagg tgcaaaagtc
180
caaatgctgg cacttcaggt gtggccggca cccagccagg cgcagtgggt gggcagggcg
240
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480
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600

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tcgacagggg ccaggggtccc agcgggtgcg cgagagctgc gcccgctggg gctgcaaggt
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 cggcggcgcg ggctgccggc ttttcaggag ctcttgagc tggcccttca cctgctgctg
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 780
 cgcgc
 785

<210> 5786
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 5786
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 Arg Ser His Ala Ala Gly Glu Gly Pro Ala Pro Gly Ala Pro Glu
 20 25 30
 Lys Pro Ala Ala Arg Ala Ala Asp Leu Ala Ala Pro Ala Gly Ala Ala
 35 40 45
 Leu Ala Gln Pro Leu Gly Pro Trp Pro Leu Ser Ser Ala Gly Pro Arg
 50 55 60
 Leu Val Phe Asn Arg Val Asn Arg Arg Arg Asp Pro Ser Lys Ser Pro
 65 70 75 80
 Ser Leu Gln Gly Thr Gln Glu Thr Tyr Thr Leu Ala His Lys Glu Asn
 85 90 95
 Val Arg Phe Val Ser Glu Ala Trp Gln Gln Val Gln Gln Gln Leu Asp
 100 105 110
 Gly Gly Pro Ala Gly Glu Gly Gly Pro Arg Pro Val Gln Tyr Val Glu
 115 120 125
 Arg Thr Pro Asn Pro Arg Leu Gln Asn Phe Val Pro Ile Asp Leu Asp
 130 135 140
 Glu Trp Trp Ala Gln Gln Phe Leu Ala Arg Ile Thr Ser Cys Ser
 145 150 155

<210> 5787
 <211> 1683
 <212> DNA
 <213> Homo sapiens

<400> 5787
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 120
 ccngggcgag gaggattctg ggagttggag gccgaggctg cgaccngcag gcgcaaacct
 180
 gcccttgggg tgagggtgt aagtggcgcg attcgcggca gcgccccgat ggaacctcct
 240
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 300
 cagactagga tggctgtatc actaacagca gctgaaactc tggcccttca gggtagacag
 360

ggacaagaga agatgatgat gatgggacca aaggaagagg aacagtcttg tgagtatgag
420
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480
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1140
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1680
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1683

<210> 5788

<211> 417

<212> PRT

<213> Homo sapiens

<400> 5788

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			20					25					30				
Ser	Cys	Glu	Tyr	Glu	Thr	Arg	Leu	Pro	Gly	Asn	His	Ser	Thr	Ser	Gln		
		35					40					45					
Glu	Ile	Phe	Arg	Gln	Arg	Phe	Arg	His	Leu	Arg	Tyr	Gln	Glu	Thr	Pro		
	50					55					60						
Gly	Pro	Arg	Glu	Ala	Leu	Ser	Gln	Leu	Arg	Val	Leu	Cys	Cys	Glu	Trp		
65					70					75					80		
Leu	Arg	Pro	Glu	Lys	His	Thr	Lys	Glu	Gln	Ile	Leu	Glu	Phe	Leu	Val		
				85					90					95			
Leu	Glu	Gln	Phe	Leu	Thr	Ile	Leu	Pro	Glu	Glu	Leu	Gln	Ser	Trp	Val		
		100						105					110				
Arg	Gly	His	His	Pro	Lys	Ser	Gly	Glu	Glu	Ala	Val	Thr	Val	Leu	Glu		
		115					120					125					
Asp	Leu	Glu	Lys	Gly	Leu	Glu	Pro	Glu	Pro	Gln	Val	Pro	Gly	Pro	Ala		
	130					135					140						
His	Gly	Pro	Ala	Gln	Glu	Glu	Pro	Trp	Glu	Lys	Lys	Glu	Ser	Leu	Gly		
145					150					155					160		
Ala	Ala	Gln	Glu	Ala	Leu	Ser	Ile	Gln	Leu	Gln	Pro	Lys	Glu	Thr	Gln		
			165						170					175			
Pro	Phe	Pro	Lys	Ser	Glu	Gln	Val	Tyr	Leu	His	Phe	Leu	Ser	Val	Val		
		180						185					190				
Thr	Glu	Asp	Gly	Pro	Glu	Pro	Lys	Asp	Lys	Gly	Ser	Leu	Pro	Gln	Pro		
	195						200					205					
Pro	Ile	Thr	Glu	Val	Glu	Ser	Gln	Val	Phe	Ser	Glu	Lys	Leu	Ala	Thr		
	210					215					220						
Asp	Thr	Ser	Thr	Phe	Glu	Ala	Thr	Ser	Glu	Gly	Thr	Leu	Glu	Leu	Gln		
225					230					235					240		
Gln	Arg	Asn	Pro	Lys	Ala	Glu	Arg	Leu	Arg	Trp	Ser	Pro	Ala	Gln	Glu		
			245						250					255			
Glu	Ser	Phe	Arg	Gln	Met	Val	Val	Ile	His	Lys	Glu	Ile	Pro	Thr	Gly		
		260						265				270					
Lys	Lys	Asp	His	Glu	Cys	Ser	Glu	Cys	Gly	Lys	Thr	Phe	Ile	Tyr	Asn		
		275					280					285					
Ser	His	Leu	Val	Val	His	Gln	Arg	Val	His	Ser	Gly	Glu	Lys	Pro	Tyr		
	290					295					300						
Lys	Cys	Ser	Asp	Cys	Gly	Lys	Thr	Phe	Lys	Gln	Ser	Ser	Asn	Leu	Gly		
305					310					315					320		
Gln	His	Gln	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Phe	Glu	Cys	Asn	Glu		
			325						330					335			
Cys	Gly	Lys	Ala	Phe	Arg	Trp	Gly	Ala	His	Leu	Val	Gln	His	Gln	Arg		
		340						345				350					
Ile	His	Ser	Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Asn	Glu	Cys	Gly	Lys	Ala		
	355						360					365					
Phe	Ser	Gln	Ser	Ser	Tyr	Leu	Ser	Gln	His	Arg	Arg	Ile	His	Ser	Gly		
	370					375					380						
Glu	Lys	Pro	Phe	Ile	Cys	Lys	Glu	Cys	Gly	Lys	Ala	Tyr	Gly	Trp	Cys		
385					390					395					400		
Ser	Glu	Leu	Ile	Arg	His	Arg	Arg	Val	His	Ala	Arg	Lys	Glu	Pro	Ser		
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His																	

<210> 5789
<211> 1201
<212> DNA
<213> Homo sapiens

<400> 5789
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1200
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1201

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<212> PRT
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<400> 5790

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 Ser Gln Val Lys Ile His Thr Ile Leu Ser Asn Thr His Arg Gln Ala
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<212> DNA

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<400> 5791

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<212> PRT

<213> Homo sapiens

<400> 5792

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<211> 2767

<212> DNA

<213> Homo sapiens

<400> 5793

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<212> PRT

<213> Homo sapiens

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Tyr	Leu	Arg	Lys	Glu	Met	Thr	Gln	Asn	Ile	Tyr	Gln	Met	Ala	Thr	Phe
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Gly	Thr	Thr	Ala	Gly	Phe	Ser	Gly	Ile	Phe	Ser	Asn	Phe	Leu	Phe	Arg
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Pro Leu Pro Pro Lys Gly Arg Val Leu Ile His Trp Met Thr Leu Cys
145      150      155      160
Gln Thr Gln Met Lys Leu Met Ala Ile Pro Leu Val Phe Gln Ile Met
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<210> 5798
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Ser Gln Arg Asn Tyr Arg Ser Leu Ser Leu Tyr Cys Trp Leu Ala Arg
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Glu Gly Arg Thr Ser Ser Tyr Gln Gly Asn Gln Gly Ser Leu Arg Pro
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<210> 5799

<211> 4261

<212> DNA

<213> Homo sapiens

<400> 5799

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<211> 535

<212> PRT

<213> Homo sapiens

<400> 5800

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<212> DNA

<213> Homo sapiens

<400> 5801

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<212> PRT

<213> Homo sapiens

<400> 5802

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<211> 692

<212> DNA

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<213> Homo sapiens

<400> 5804

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<211> 1112

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<210> 5808

<211> 261

<212> PRT

<213> Homo sapiens

<400> 5808

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His	Leu	Arg	His	Pro	Val	Cys	Val	Glu	Leu	Leu	Thr	Val	Leu	Trp	Val	195	200	205	
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Leu	Tyr	Leu	Gly	Leu	Ala	His	Gly	Leu	Asp	Gln	Gln	Asp	Leu	Arg	Tyr	225	230	235	240
Leu	Arg	Ala	Gln	Leu	Gln	Arg	Lys	Leu	His	Leu	Leu	Ser	Arg	Pro	Gln	245	250	255	
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<211> 2009

<212> DNA

<213> Homo sapiens

<400> 5809

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 2009

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 <212> PRT
 <213> Homo sapiens

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 <211> 1607
 <212> DNA
 <213> Homo sapiens

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<211> 463

<212> PRT

<213> Homo sapiens

<400> 5812

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Thr	Pro	Gln	Ala	Ile	Glu	Pro	Gln	Ala	Ile	Val	Gln	Gln	Val	Pro	Ala
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Pro	Glu	Lys	Lys	Gly	Leu	Phe	Leu	Lys	His	Val	Glu	Tyr	Glu	Val	Ser
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Ser	Gln	Arg	Phe	Lys	Ser	Ser	Val	Tyr	Arg	Arg	Tyr	Asn	Asp	Phe	Val
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Gly Ser Asp Val Gln Asn Lys Leu Lys Glu Ser Ala Gln Cys Val Gly
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Asp Glu Phe Leu Asn Cys Lys Leu Ala Thr Arg Ala Lys Asp Phe Leu
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Pro Ala Asp Ile Gln Ala Gln Phe Ala Ile Ser Arg Glu Leu Ile Arg
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Asn Ile Tyr Asn Ser Phe His Lys Leu Arg Asp Arg Ala Glu Arg Ile
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Ala Leu Asn Ser Ser Thr Trp Gly Ser Leu Lys Gln Ala Leu Lys Gly
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<211> 2991

<212> DNA

<213> Homo sapiens

<400> 5813

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<211> 149

<212> PRT

<213> Homo sapiens

<400> 5814

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			20					25					30		
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<210> 5815

<211> 590

<212> DNA

<213> Homo sapiens

<400> 5815

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<210> 5816

<211> 196

<212> PRT

<213> Homo sapiens

<400> 5816

Phe Ile Gln Ala Ala Leu Gly Asp Gln Pro Arg Asp Ile Leu Cys Gly
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 Lys Glu Arg Arg Lys Glu Ile Asp Leu Leu Leu Gly Gln Thr Asp Asp

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      35      40      45
Thr Arg Tyr His Val Leu Val Asn Leu Gly Leu Pro Ser Leu Phe Ser
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Phe Gly Leu Val Asp Asp Ala His His Leu Ile Asn Ala Leu Arg Gln
  65      70      75      80
Gln Ser Ile Thr Leu His Leu Val Asp Val Met Pro Val Leu Ile Thr
      85      90      95
Leu Ser Ser Leu Gly Ser Ser Phe Leu Leu His Leu Arg Phe Gly Pro
      100      105      110
Leu Ser Leu Val Ser His Thr Gly Ala Leu Gln Leu Pro Asn Lys Gly
      115      120      125
Gln His Leu Ser Cys Gly Phe Ile Pro Ala Gly Pro Val Asn Glu Arg
      130      135      140
Thr Val Ser Leu Glu His Lys Ile Arg Val Arg Leu Val Leu Val Leu
      145      150      155      160
Gln Thr Thr Gly Gly Tyr Ile Arg His Gly Arg Gly Cys Ser Glu Ala
      165      170      175
Ser Asp His His Ala Ser Ile Pro Gln Ala Ala Asn Gly Arg Arg Ser
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Leu Leu Leu Ala
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<210> 5817

<211> 648

<212> DNA

<213> Homo sapiens

<400> 5817

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<210> 5818

<211> 191

<212> PRT

<213> Homo sapiens

<400> 5818

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Met Asn Asn Gly Ser Pro Thr Ala Leu Ser Gly Ser Lys Thr Asn Ser
      35           40           45
Pro Lys Asn Ser Val His Lys Leu Asp Val Ser Arg Ser Pro Pro Leu
      50           55           60
Met Val Lys Lys Asn Pro Ala Phe Asn Lys Gly Ser Gly Ile Val Thr
65           70           75           80
Asn Gly Ser Phe Ser Ser Ser Asn Ala Glu Gly Leu Glu Lys Thr Gln
          85           90           95
Thr Thr Pro Asn Gly Ser Leu Gln Ala Arg Arg Ser Ser Ser Leu Lys
          100          105          110
Val Ser Gly Thr Lys Met Gly Thr His Ser Val Gln Asn Gly Thr Val
      115          120          125
Arg Met Gly Ile Leu Asn Ser Asp Thr Leu Gly Asn Pro Thr Asn Val
      130          135          140
Arg Asn Met Ser Trp Leu Pro Asn Gly Tyr Val Thr Leu Arg Asp Asn
145          150          155          160
Lys Gln Lys Glu Gln Ala Gly Glu Leu Gly Gln His Asn Arg Leu Ser
          165          170          175
Pro Met Ile Met Ser Ile Thr Val Leu His Asp Glu Leu Asp Asp
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<210> 5819

<211> 1652

<212> DNA

<213> Homo sapiens

<400> 5819

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600

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 1652

<210> 5820

<211> 274

<212> PRT

<213> Homo sapiens

<400> 5820

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 Pro Lys Asn Asp Ala Asp Asp Glu Ser Glu Thr Pro Glu Glu Leu Glu
 35 40 45
 Glu Glu Ile Pro Val Val Ile Cys Ala Ala Ala Gly Arg Met Gly Ala
 50 55 60
 Thr Met Ala Ala Ile Asn Ser Ile Tyr Ser Asn Pro Asp Ala Asn Ile
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<210> 5821
<211> 3292
<212> DNA
<213> Homo sapiens
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<210> 5822

<211> 712

<212> PRT

<213> Homo sapiens

<400> 5822

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 His Lys Glu Arg Cys Ile Ala Ala Ser Leu Glu Leu Asn Asn Pro Val
 35 40 45
 Pro Glu Gln Pro Pro Leu Pro Thr Ser Glu Ser Pro Phe Ala Trp Ser
 50 55 60
 Pro Leu Ala Gly Glu Lys Phe Val Glu Val Tyr Lys Glu Ala His Leu
 65 70 75 80
 Leu Ala Leu His Ile Glu Ser Ser Ser Arg Asn Gln Ala Ala Gln Ala
 85 90 95
 Ala Lys Pro Glu Asp Pro Arg Ser Gln Gly Val Glu Arg Phe Ile Gln

100 105 110
 Glu Ser Lys Leu Lys Ile Asn Leu Phe Glu Lys Glu Lys Glu Met Lys
 115 120 125
 Lys Ser Pro Thr Ser Leu Lys Arg Glu Thr Tyr Tyr Leu Ser Asp Ser
 130 135 140
 Pro Leu Leu Gly Pro Pro Val Gly Glu Pro Arg Leu Leu Ala Ser Ser
 145 150 155 160
 Pro Ala Leu Pro Ser Ser Gly Ala Gln Ala Arg Leu Thr Arg Ala Pro
 165 170 175
 Gly Pro Pro His Ser Ala His Ala Leu Pro Arg Glu Ser Cys Thr Ala
 180 185 190
 His Ala Ala Ser Gln Ala Ala Thr Gln Arg Lys Pro Gly Thr Lys Leu
 195 200 205
 Leu Leu Pro Arg Ala Ala Ser Val Arg Gly Arg Ser Ile Pro Gly Ala
 210 215 220
 Ala Glu Lys Pro Lys Lys Glu Ile Pro Ala Ser Pro Ser Arg Thr Lys
 225 230 235 240
 Ile Pro Ala Glu Lys Glu Ser His Arg Asp Val Leu Pro Asp Lys Pro
 245 250 255
 Ala Pro Gly Ala Val Asn Val Pro Ala Ala Gly Ser His Leu Gly Gln
 260 265 270
 Gly Lys Arg Ala Ile Pro Val Pro Asn Lys Leu Gly Leu Lys Lys Thr
 275 280 285
 Leu Leu Lys Ala Pro Gly Ser Thr Ser Asn Leu Ala Arg Lys Ser Ser
 290 295 300
 Ser Gly Pro Val Trp Ser Gly Ala Ser Ser Ala Cys Thr Ser Pro Ala
 305 310 315 320
 Val Gly Lys Ala Lys Ser Ser Glu Phe Ala Ser Ile Pro Ala Asn Ser
 325 330 335
 Ser Arg Pro Leu Ser Asn Ile Ser Lys Ser Gly Arg Met Gly Pro Ala
 340 345 350
 Met Leu Arg Pro Ala Leu Pro Ala Gly Pro Val Gly Ala Ser Ser Trp
 355 360 365
 Gln Ala Lys Arg Val Asp Val Ser Glu Leu Ala Ala Glu Gln Leu Thr
 370 375 380
 Ala Pro Pro Ser Ala Ser Pro Thr Gln Pro Gln Thr Pro Glu Gly Gly
 385 390 395 400
 Gly Gln Trp Leu Asn Ser Ser Cys Ala Trp Ser Glu Ser Ser Gln Leu
 405 410 415
 Asn Lys Thr Arg Ser Ile Arg Arg Arg Asp Ser Cys Leu Asn Ser Lys
 420 425 430
 Thr Lys Val Met Pro Thr Pro Thr Asn Gln Phe Lys Ile Pro Lys Phe
 435 440 445
 Ser Ile Gly Asp Ser Pro Asp Ser Ser Thr Pro Lys Leu Ser Arg Ala
 450 455 460
 Gln Arg Pro Gln Ser Cys Thr Ser Val Gly Arg Val Thr Val His Ser
 465 470 475 480
 Thr Pro Val Arg Arg Ser Ser Gly Pro Ala Pro Gln Ser Leu Leu Ser
 485 490 495
 Ala Trp Arg Val Ser Ala Leu Pro Thr Pro Ala Ser Arg Arg Cys Ser
 500 505 510
 Gly Leu Pro Pro Met Thr Pro Lys Thr Met Pro Arg Ala Val Gly Ser
 515 520 525
 Pro Leu Cys Val Pro Ala Arg Arg Arg Ser Ser Glu Pro Arg Lys Asn

530 535 540
 Ser Ala Met Arg Thr Glu Pro Thr Arg Glu Ser Asn Arg Lys Thr Asp
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 Ser Arg Leu Val Asp Val Ser Pro Asp Arg Gly Ser Pro Pro Ser Arg
 565 570 575
 Val Pro Gln Ala Leu Asn Phe Ser Pro Glu Glu Ser Asp Ser Thr Phe
 580 585 590
 Ser Lys Ser Thr Ala Thr Glu Val Ala Arg Glu Glu Ala Lys Pro Gly
 595 600 605
 Gly Asp Ala Ala Pro Ser Glu Ala Leu Leu Val Asp Ile Lys Leu Glu
 610 615 620
 Pro Leu Ala Val Thr Pro Asp Ala Ala Ser Gln Pro Leu Ile Asp Leu
 625 630 635 640
 Pro Leu Ile Asp Phe Cys Asp Thr Pro Glu Ala His Val Ala Val Gly
 645 650 655
 Ser Glu Ser Arg Pro Leu Ile Asp Leu Met Thr Asn Thr Pro Asp Met
 660 665 670
 Asn Lys Asn Val Ala Lys Pro Ser Pro Val Val Gly Gln Leu Ile Asp
 675 680 685
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<210> 5823
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 <212> DNA
 <213> Homo sapiens

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 720

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<210> 5824
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 <212> PRT
 <213> Homo sapiens

<400> 5824
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 35 40 45
 Met Ala Lys Ile Gly Asn Lys Glu Ala Cys Lys Val Leu Ala Lys Gln
 50 55 60
 Leu Val His Leu Arg Lys Gln Lys Thr Arg Thr Phe Ala Val Ser Ser
 65 70 75 80
 Lys Val Thr Ser Met Ser Thr Gln Thr Lys Val Met Asn Ser Gln Met
 85 90 95
 Lys Met Ala Gly Ala Met Ser Thr Thr Ala Lys Thr Met Gln Ala Val
 100 105 110
 Asn Lys Lys Met Asp Pro Gln Lys Thr Leu Gln Thr Met Gln Asn Phe
 115 120 125
 Gln Lys Glu Asn Met Lys Met Glu Met Thr Glu Glu Met Ile Asn Asp
 130 135 140
 Thr Leu Asp Asp Ile Phe Asp Gly Ser Asp Asp Glu Glu Glu Ser Gln
 145 150 155 160
 Asp Ile Val Asn Gln Val Leu Asp Glu Ile Gly Ile Glu Ile Ser Gly
 165 170 175
 Lys Met Ala Lys Ala Pro Ser Ala Ala Arg Ser Leu Pro Ser Ala Ser
 180 185 190
 Thr Ser Lys Ala Thr Ile Ser Asp Glu Glu Ile Glu Arg Gln Leu Lys
 195 200 205
 Ala Leu Gly Val Asp
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<210> 5825
 <211> 1940
 <212> DNA
 <213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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<211> 1479

<212> PRT

<213> Homo sapiens

<400> 5830

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 Ser Arg Val Lys Trp Ser Glu Ala Gln Phe Ser Cys Glu Gln Gln Glu
 995 1000 1005
 Ala Gln Leu Val Thr Ile Thr Asn Pro Leu Glu Gln Ala Phe Ile Thr
 1010 1015 1020
 Ala Ser Leu Pro Asn Val Thr Phe Asp Leu Trp Ile Gly Leu His Ala
 1025 1030 1035 1040
 Ser Gln Arg Asp Phe Gln Trp Val Glu Gln Glu Pro Leu Met Tyr Ala
 1045 1050 1055
 Asn Trp Ala Pro Gly Glu Pro Ser Gly Pro Ser Pro Ala Pro Ser Gly
 1060 1065 1070
 Asn Lys Pro Thr Ser Cys Ala Val Val Leu His Ser Pro Ser Ala His
 1075 1080 1085
 Phe Thr Gly Arg Trp Asp Asp Arg Ser Cys Thr Glu Glu Thr His Gly
 1090 1095 1100
 Phe Ile Cys Gln Lys Gly Thr Asp Pro Ser Leu Ser Pro Ser Pro Ala
 1105 1110 1115 1120
 Ala Leu Pro Pro Ala Pro Gly Thr Glu Leu Ser Tyr Leu Asn Gly Thr
 1125 1130 1135
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 1140 1145 1150
 Cys Glu Ser His Asn Ala Ser Leu Ala Tyr Val Pro Asp Pro Tyr Thr
 1155 1160 1165
 Gln Ala Phe Leu Thr Gln Ala Ala Arg Gly Leu Arg Thr Pro Leu Trp
 1170 1175 1180
 Ile Gly Leu Ala Gly Glu Glu Gly Ser Arg Arg Tyr Ser Trp Val Ser
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 Glu Glu Pro Leu Asn Tyr Val Gly Trp Gln Asp Gly Glu Pro Gln Gln
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 1235 1240 1245
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 1250 1255 1260
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 His Met Glu Leu Leu Leu Gly His Lys Glu Ala Arg Gln Arg Cys Gln
 1285 1290 1295
 Arg Ala Gly Gly Ala Val Leu Ser Ile Leu Asp Glu Met Glu Asn Val
 1300 1305 1310
 Phe Val Trp Glu His Leu Gln Ser Tyr Glu Gly Gln Ser Arg Gly Ala
 1315 1320 1325
 Trp Leu Gly Met Asn Phe Asn Pro Lys Gly Gly Thr Leu Val Trp Gln
 1330 1335 1340
 Asp Asn Thr Ala Val Asn Tyr Ser Asn Trp Gly Pro Pro Gly Leu Gly
 1345 1350 1355 1360
 Pro Ser Met Leu Ser His Asn Ser Cys Tyr Trp Ile Gln Ser Asn Ser
 1365 1370 1375
 Gly Leu Trp Arg Pro Gly Ala Cys Thr Asn Ile Thr Met Gly Val Val
 1380 1385 1390
 Cys Lys Leu Pro Arg Ala Glu Gln Ser Ser Phe Ser Pro Ser Ala Leu
 1395 1400 1405
 Pro Glu Asn Pro Ala Ala Leu Val Val Val Leu Met Ala Val Leu Leu
 1410 1415 1420
 Leu Leu Ala Leu Leu Thr Ala Ala Leu Ile Leu Tyr Arg Arg Arg Gln
 1425 1430 1435 1440
 Ser Ile Glu Arg Gly Ala Phe Glu Gly Ala Arg Tyr Ser Arg Ser Ser
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<210> 5831

<211> 2216

<212> DNA

<213> Homo sapiens

<400> 5831

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 180
 tgagatactt gttattgcct cattttgtag acgagaaaac gggcatagag ggtgagacat
 240
 tggcccgagt tcattccgta aggggtggag cctggaattc agatacagga ggaagttaac
 300
 atccctaata ggaggggttct gggtactggg gccactgggc ttcttggcag agctgtacac
 360
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 420

aaatttgaac aggttaattct gttggattct aatgcagttc atcacatcat tcatgatttt
480
cagcccatg ttatagtaca ttgtgcagca gagagaagac cagatgttgt agaaaatcag
540
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660
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720
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1260
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1380
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1980
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 2216

<210> 5832

<211> 322

<212> PRT

<213> Homo sapiens

<400> 5832

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Arg	Arg	Val	Leu	Val	Thr	Gly	Ala	Thr	Gly	Leu	Leu	Gly	Arg	Ala	Val
			20					25					30		
His	Lys	Glu	Phe	Gln	Gln	Asn	Asn	Trp	His	Ala	Val	Gly	Cys	Gly	Phe
		35				40						45			
Arg	Arg	Ala	Arg	Pro	Lys	Phe	Glu	Gln	Val	Asn	Leu	Leu	Asp	Ser	Asn
		50				55					60				
Ala	Val	His	His	Ile	Ile	His	Asp	Phe	Gln	Pro	His	Val	Ile	Val	His
65				70					75					80	
Cys	Ala	Ala	Glu	Arg	Arg	Pro	Asp	Val	Val	Glu	Asn	Gln	Pro	Asp	Ala
			85						90					95	
Ala	Ser	Gln	Leu	Asn	Val	Asp	Ala	Ser	Gly	Asn	Leu	Ala	Lys	Glu	Ala
			100					105						110	
Ala	Ala	Val	Gly	Ala	Phe	Leu	Ile	Tyr	Ile	Ser	Ser	Asp	Tyr	Val	Phe
			115					120					125		
Asp	Gly	Thr	Asn	Pro	Pro	Tyr	Arg	Glu	Glu	Asp	Ile	Pro	Ala	Pro	Leu
			130				135				140				
Asn	Leu	Tyr	Gly	Lys	Thr	Lys	Leu	Asp	Gly	Glu	Lys	Ala	Val	Leu	Glu
145				150						155				160	
Asn	Asn	Leu	Gly	Ala	Ala	Val	Leu	Arg	Ile	Pro	Ile	Leu	Tyr	Gly	Glu
			165						170					175	
Val	Glu	Lys	Leu	Glu	Glu	Ser	Ala	Val	Thr	Val	Met	Phe	Asp	Lys	Val
			180					185						190	
Gln	Phe	Ser	Asn	Lys	Ser	Ala	Asn	Met	Asp	His	Trp	Gln	Gln	Arg	Phe
			195				200						205		
Pro	Thr	His	Val	Lys	Asp	Val	Ala	Thr	Val	Cys	Arg	Gln	Leu	Ala	Glu
			210				215					220			
Lys	Arg	Met	Leu	Asp	Pro	Ser	Ile	Lys	Gly	Thr	Phe	His	Trp	Ser	Gly
225				230						235				240	
Asn	Glu	Gln	Met	Thr	Lys	Tyr	Glu	Met	Ala	Cys	Ala	Ile	Ala	Asp	Ala
			245						250					255	
Phe	Asn	Leu	Pro	Ser	Ser	His	Leu	Arg	Pro	Ile	Thr	Asp	Ser	Pro	Val
			260					265					270		
Leu	Gly	Ala	Gln	Arg	Pro	Arg	Asn	Ala	Gln	Leu	Asp	Cys	Ser	Lys	Leu
			275				280						285		
Glu	Thr	Leu	Gly	Ile	Gly	Gln	Arg	Thr	Pro	Phe	Arg	Ile	Gly	Ile	Lys
			290				295				300				
Glu	Ser	Leu	Trp	Pro	Phe	Leu	Ile	Asp	Lys	Arg	Trp	Arg	Gln	Thr	Val
305					310					315				320	
Phe	His														

<210> 5833
 <211> 805
 <212> DNA
 <213> Homo sapiens

<400> 5833
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 gaaacatgtc caaaaggaga cgagccaaga ggtgacgagc aacagggtgga aagtatgacc
 120
 cctaaacctg tgctccagga agaaaacaac caagagtctt ttattgcatt tgctcgggtg
 180
 ttcagtgggtg tggctcgaag aggaaagaaa atttttgtct tggggcccaa atacagtcct
 240
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 300
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 360
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 420
 gtgctgaaat ctgcaacact gtgtagcctg ccatacctgcc caccatttat accactcaac
 480
 ttcgaagcca ctccatttgt gagagttgct gttgaaccaa aacatccaag tgaaatgcct
 540
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 600
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 660
 gatgacttaa aagaaagggt tgcaaagatt catatcagtg tatctgaacc tattattcca
 720
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 780
 cagcaaaaag ttgcagtcac acacc
 805

<210> 5834
 <211> 268
 <212> PRT
 <213> Homo sapiens

<400> 5834
 Lys Leu Ala Ala Gln Gly Gln Ala Pro Leu Glu Pro Thr Gln Asp
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 Gly Ser Ala Ile Glu Thr Cys Pro Lys Gly Asp Glu Pro Arg Gly Asp
 20 25 30
 Glu Gln Gln Val Glu Ser Met Thr Pro Lys Pro Val Leu Gln Glu Glu
 35 40 45
 Asn Asn Gln Glu Ser Phe Ile Ala Phe Ala Arg Val Phe Ser Gly Val
 50 55 60
 Ala Arg Arg Gly Lys Lys Ile Phe Val Leu Gly Pro Lys Tyr Ser Pro
 65 70 75 80
 Leu Glu Phe Leu Arg Arg Val Pro Leu Gly Phe Ser Ala Pro Pro Asp

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<210> 5835
<211> 420
<212> DNA
<213> Homo sapiens
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<400> 5835
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120
gcactgcata agcaagttct tatgggccca tataatccag acacttgtcc tgaggttgga
180
ttctttgatg tgttggggaa tgacaggagg agagaatggg cagccctggg aaacatgtct
240
aaagaggatg ccatggtgga gtttgtcaag ctcttaataa ggtgttgcca tctcttttca
300
acatatgttg cgtcccacaa aatagagaag gaagagcaag acaaaaaaag gaaggaggaa
360
gaggagcgaa ggcggcgtga agaggaagaa agagaacgtc tgcaaaagga ggaagagaaa
420

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<210> 5836
<211> 140
<212> PRT
<213> Homo sapiens
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<400> 5836
Xaa Leu Glu Gln Arg Trp Gly Phe Gly Leu Glu Glu Leu Tyr Gly Leu
1 5 10 15
Ala Leu Arg Phe Phe Lys Glu Lys Asp Gly Lys Ala Phe His Pro Thr

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                20                25                30
Tyr Glu Glu Lys Leu Lys Leu Val Ala Leu His Lys Gln Val Leu Met
                35                40                45
Gly Pro Tyr Asn Pro Asp Thr Cys Pro Glu Val Gly Phe Phe Asp Val
                50                55                60
Leu Gly Asn Asp Arg Arg Arg Glu Trp Ala Ala Leu Gly Asn Met Ser
65                70                75                80
Lys Glu Asp Ala Met Val Glu Phe Val Lys Leu Leu Asn Arg Cys Cys
                85                90                95
His Leu Phe Ser Thr Tyr Val Ala Ser His Lys Ile Glu Lys Glu Glu
                100                105                110
Gln Asp Lys Lys Arg Lys Glu Glu Glu Glu Arg Arg Arg Arg Glu Glu
                115                120                125
Glu Glu Arg Glu Arg Leu Gln Lys Glu Glu Glu Lys
                130                135                140

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<210> 5837

<211> 582

<212> DNA

<213> Homo sapiens

<400> 5837

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120
tgggccaagg gggacatcca gggggcaggg gccgcctccc gccgtgcctt cctgctgggg
180
gtcctcgccg tcgggctggg cgtgtgcacg tatgcggtg cctgggtgac cctggccgcc
240
taccttgctt cccgagacct gccctagttg cccctacagc cctcactgtg aacctgagg
300
ccggcagccc agcaaactct tgggcagaga gtggagaatc ttggtggatg aggctgcggc
360
ggcggcagga gcatctagaa acgggagcga gctggactgg aacccttccc cttcctggcc
420
accgctcttc gggcggcagc aacctgagat taaacaccag acacccttgg cctgggctca
480
cgaggaaggg gctgcagttc tccaaggatt cccgcctgct cccagatccc cgggagtcgt
540
aggaaccctg tcctggacgc tgacgtcggc tttcagggat cc
582

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<210> 5838

<211> 88

<212> PRT

<213> Homo sapiens

<400> 5838

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Phe Ser Met Leu Cys Cys Phe Trp Pro Val Gly Ile Ala Ala Phe Cys
                20                25                30
Leu Ala Gln Lys Thr Asn Lys Ala Trp Ala Lys Gly Asp Ile Gln Gly

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	35		40		45														
Ala	Gly	Ala	Ala	Ser	Arg	Arg	Ala	Phe	Leu	Leu	Gly	Val	Leu	Ala	Val				
	50					55					60								
Gly	Leu	Gly	Val	Cys	Thr	Tyr	Ala	Ala	Ala	Leu	Val	Thr	Leu	Ala	Ala				
65					70					75					80				
Tyr	Leu	Ala	Ser	Arg	Asp	Pro	Pro												
					85														

<210> 5839

<211> 1895

<212> DNA

<213> Homo sapiens

<400> 5839

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120
cattcgaatg catcccaacc agtgctcagc tgcgtaacga catggagaga ggcagggggg
180
aatagaaagc aaatttaaaa acaccaacac ccaaacacac aagactgcac acaagaaaaa
240
gtgctcaaga aactttggct ttgaaggga ttcagtgaag ggaagcgatt gtgcaggagg
300
aagggaagaa acccacgac accctaagg gcggggggct ggagggcgag gccctgagac
360
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420
ctaggaagaa gctgagtgat gaggctgggt gatgggatcg cttgacgggc tgggaggagg
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aaaaatagtc ggtaatgcc tgatcctgac aagctgtgag atgctgtctt gcctgtctct
600
gccttttctt ctaagttttc ctccttttct ttgcacaggt gtcaggtagc accccagggg
660
tgcaggagct ggtgttttca tgacaaacaa aaatggggag gttgactcta tctcaaaact
720
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1020
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1080
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1140
cgtttcccta aagaatcacc cagatcttaa ctgccctctc caccttcttt tttttccccc
1200

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 1380
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 1440
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 1500
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 1620
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 1740
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 1860
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 1895

<210> 5840
 <211> 138
 <212> PRT
 <213> Homo sapiens

<400> 5840
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 20 25 30
 Leu Met Val His Gly Trp Cys Pro Val Ile Phe Ser Trp Ala Val Ala
 35 40 45
 Pro Arg Gly Ser Gly Phe Pro Ala Gln Gly Ile Phe Asp Pro Cys Gln
 50 55 60
 Arg Arg Glu Arg Glu Leu Ser Trp Phe Pro Phe His Leu Phe Ser Gly
 65 70 75 80
 Cys Phe Lys Ala Asn Ile Pro Val Pro Asn Val Leu Cys Gly Leu Asn
 85 90 95
 Pro Gly Arg Gly Gln Gly His Ile Gln Val Gly Leu Ala Ser Ser Thr
 100 105 110
 Thr Phe Trp Pro Gln Gln Arg Met Gly Phe His Gln Ser Leu Ser Thr
 115 120 125
 Ser Arg Phe Pro Lys Glu Ser Pro Arg Ser
 130 135

<210> 5841
 <211> 3411
 <212> DNA
 <213> Homo sapiens

<400> 5841
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120
ttctcggacc ttcccagcgg caccctcaat tttcaccgg tgtggacatc tcgaacttgc
180
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240
caaagtgatg ctgctctgca ggtggacatt tctgatgctc ttagtgagcg ggataaagta
300
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420
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480
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660
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720
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780
gatgatttct ttgagcacga acgaacattt cttttggaat atcataaccg agttaaggat
840
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900
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960
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1080
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1140
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1200
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Gln	Phe	Gly	Arg	Arg	Leu	Arg	Arg	Arg	Thr	Ser	His	Ala	Gly	Arg	Tyr														
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Gln	Gly	Pro	Ile	Ser	Asp	Asn	Tyr	Leu	Phe	Thr	Pro	Gly	Lys	Ala	Ala														
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 690 695 700
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 705 710 715 720
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 Ala Val Thr Leu Pro Pro Asn Leu His Leu Gln Ile Leu Ser Ile Pro
 740 745 750
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 755 760 765
 Lys Gly His Arg Gly Glu Ala Gln Ala Asp Leu Arg Arg Val Leu Leu
 770 775 780
 Arg Leu Tyr His Leu Tyr Glu Val Gly Glu Asp Pro Val Leu Ser Gln
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<210> 5845

<211> 2762

<212> DNA

<213> Homo sapiens

<400> 5845

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<210> 5846

<211> 257

<212> PRT

<213> Homo sapiens

<400> 5846

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			20					25					30		
Gln	Gln	Glu	Lys	Glu	Trp	Leu	Leu	Ala	Glu	Glu	Thr	Ala	Ala	Thr	Ala
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Ser	Ala	Ile	Glu	Ala	Met	Lys	Lys	Ala	Tyr	Gln	Glu	Glu	Leu	Ser	Arg
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Glu	Leu	Ser	Lys	Thr	Arg	Ser	Leu	Gln	Gln	Gly	Pro	Asp	Gly	Leu	Arg
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Lys	Gln	His	Gln	Ser	Asp	Val	Glu	Ala	Leu	Lys	Arg	Glu	Leu	Gln	Val
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Leu	Ser	Glu	Gln	Tyr	Ser	Gln	Lys	Cys	Leu	Glu	Ile	Gly	Ala	Leu	Met
			100					105					110		
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			130			135						140			
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			165					170					175		
Leu	Leu	Arg	Val	Lys	Glu	Asn	Glu	Leu	Gln	Tyr	Leu	Lys	Lys	Glu	Val
			180					185					190		
Gln	Cys	Leu	Arg	Asp	Glu	Leu	Gln	Met	Met	Gln	Lys	Asp	Lys	Arg	Phe
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Thr	Ser	Gly	Lys	Tyr	Gln	Asp	Val	Tyr	Val	Glu	Leu	Ser	His	Ile	Lys

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Thr Arg Ser Glu Arg Glu Ile Glu Gln Leu Lys Glu His Leu Arg Leu		
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<210> 5847
 <211> 1021
 <212> DNA
 <213> Homo sapiens

<400> 5847
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<210> 5848
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 <212> PRT

<213> Homo sapiens

<400> 5848

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 35 40 45
 Gly Ser Ile Arg Gly Ala Ala Pro Val Ala Val Glu Pro Gly Ala Ala
 50 55 60
 Val Arg Ser Leu Leu Ser Pro Gly Leu Leu Pro His Leu Leu Pro Ala
 65 70 75 80
 Leu Gly Phe Lys Asn Lys Thr Val Leu Lys Lys Arg Cys Lys Asp Cys
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<210> 5849

<211> 3174

<212> DNA

<213> Homo sapiens

<400> 5849

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<210> 5850

<211> 154

<212> PRT

<213> Homo sapiens

<400> 5850

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Cys	Thr	Gln	Thr	Gly	His	Ala	Gln	Pro	Cys	Pro	Ser	Ala	Pro	Ser	Thr
		35					40						45		
Gly	Pro	Ile	His	Ile	Ala	Glu	Gly	Gly	Arg	Gly	Arg	Pro	Pro	Pro	Gly
	50					55					60				
Ser	Ala	Ser	Asn	Pro	Gln	Pro	Pro	Gly	Ser	Pro	His	Cys	Pro	Ser	Ala
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Gly	Leu	Ser	Pro	Val	Pro	Gly	Val	Gly	Gly	Arg	Gln	Cys	Pro	Gly	Thr
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Val	Pro	Arg	Val	Arg	Arg	Pro	Gly	Leu	Ala	Gly	His	Pro	Val	Thr	His
			100					105						110	
Arg	Ile	Asn	Arg	Lys	Thr	Ala	Ser	Pro	Pro	Asn	Leu	Cys	Pro	Arg	His
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<210> 5851

<211> 488

<212> DNA

<213> Homo sapiens

<400> 5851

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<210> 5852

<211> 82

<212> PRT

<213> Homo sapiens

<400> 5852

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Leu Thr Lys Gly Thr Ser Ala Ala His Leu Asn Ser Met Glu Val Thr
      35           40           45
Thr Glu Asp Thr Ser Arg Thr Asp Ala Tyr Glu Ser Tyr Lys Lys Lys
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<210> 5853

<211> 487

<212> DNA

<213> Homo sapiens

<400> 5853

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<210> 5854

<211> 68

<212> PRT

<213> Homo sapiens

<400> 5854

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Tyr	Arg	Arg	Ser	Gln	Glu	Gly	Gly	Pro	Ala	Arg	Pro	Ala	Ala	Pro	Asp
			20					25				30			
Thr	Pro	Ser	Gly	Arg	Ser	Gly	Pro	Ala	Ala	Pro	Trp	Arg	Thr	Pro	Ala
			35				40				45				
Arg	Thr	Pro	Pro	Arg	Leu	Leu	Pro	Thr	Leu	Cys	Pro	Val	Thr	Pro	Val
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<210> 5855

<211> 362

<212> DNA

<213> Homo sapiens

<400> 5855

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<210> 5856

<211> 113

<212> PRT

<213> Homo sapiens

<400> 5856

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Val Thr Ala Pro Leu Cys Ser Ala Asp Pro Leu Leu Ala Val Pro Pro
      20           25           30
Ser Pro Pro Asp Pro Pro Ala Gly Thr Cys Trp Gly Leu Trp Gly Pro
      35           40           45
Lys Arg Glu Gly Val Asn Glu Val Val Ala Glu Val Leu Leu Ala Ala
      50           55           60
His Glu Gly Val Gly Asp Gln Gly Glu Ala Gly Ala His Pro Val Leu
65           70           75           80
Ser Asp Ala Gly Leu Leu Val Leu Gly Leu Arg Ala Ala Leu Gly Glu
      85           90           95
His Gln Ala His Leu Gly Ser Ala Leu Asn Glu His Gln Arg Val Leu
      100          105          110
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<210> 5857

<211> 1751

<212> DNA

<213> Homo sapiens

<400> 5857

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720
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780
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840

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 960
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 1020
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<210> 5858

<211> 434

<212> PRT

<213> Homo sapiens

<400> 5858

Met	Asp	Ser	Val	Glu	Lys	Gly	Ala	Ala	Thr	Ser	Val	Ser	Asn	Pro	Arg
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Gly	Arg	Pro	Ser	Arg	Gly	Arg	Pro	Pro	Lys	Leu	Gln	Arg	Asn	Ser	Arg
			20					25					30		
Gly	Gly	Gln	Gly	Arg	Gly	Gly	Glu	Lys	Pro	Pro	His	Leu	Ala	Ala	Leu
		35					40					45			
Ile	Leu	Ala	Arg	Gly	Gly	Ser	Lys	Gly	Ile	Pro	Leu	Lys	Asn	Ile	Lys
		50				55					60				
His	Leu	Ala	Gly	Val	Pro	Leu	Ile	Gly	Trp	Val	Leu	Arg	Ala	Ala	Leu
65					70				75					80	
Asp	Ser	Gly	Ala	Phe	Gln	Ser	Val	Trp	Val	Ser	Thr	Asp	His	Asp	Glu
			85					90					95		
Ile	Glu	Asn	Val	Ala	Lys	Gln	Phe	Gly	Ala	Gln	Val	His	Arg	Arg	Ser
		100						105					110		
Ser	Glu	Val	Ser	Lys	Asp	Ser	Ser	Thr	Ser	Leu	Asp	Ala	Ile	Ile	Glu

115	120	125
Phe Leu Asn Tyr His Asn Glu Val Asp Ile Val Gly Asn Ile Gln Ala		
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Thr Ser Pro Cys Leu His Pro Thr Asp Leu Gln Lys Val Ala Glu Met		
145	150	155
Ile Arg Glu Glu Gly Tyr Asp Ser Val Phe Ser Val Val Arg Arg His		
165	170	175
Gln Phe Arg Trp Ser Glu Ile Gln Lys Gly Val Arg Glu Val Thr Glu		
180	185	190
Pro Leu Asn Leu Asn Pro Ala Lys Arg Pro Arg Arg Gln Asp Trp Asp		
195	200	205
Gly Glu Leu Tyr Glu Asn Gly Ser Phe Tyr Phe Ala Lys Arg His Leu		
210	215	220
Ile Glu Met Gly Tyr Leu Gln Gly Gly Lys Met Ala Tyr Tyr Glu Met		
225	230	235
Arg Ala Glu His Ser Val Asp Ile Asp Val Asp Ile Asp Trp Pro Ile		
245	250	255
Ala Glu Gln Arg Val Leu Arg Tyr Gly Tyr Phe Gly Lys Glu Lys Leu		
260	265	270
Lys Glu Ile Lys Leu Leu Val Cys Asn Ile Asp Gly Cys Leu Thr Asn		
275	280	285
Gly His Ile Tyr Val Ser Gly Asp Gln Lys Glu Ile Ile Ser Tyr Asp		
290	295	300
Val Lys Asp Ala Ile Gly Ile Ser Leu Leu Lys Lys Ser Gly Ile Glu		
305	310	315
Val Arg Leu Ile Ser Glu Arg Ala Cys Ser Lys Gln Thr Leu Ser Ser		
325	330	335
Leu Lys Leu Asp Cys Lys Met Glu Val Ser Val Ser Asp Lys Leu Ala		
340	345	350
Val Val Asp Glu Trp Arg Lys Glu Met Gly Leu Cys Trp Lys Glu Val		
355	360	365
Ala Tyr Leu Gly Asn Glu Val Ser Asp Glu Glu Cys Leu Lys Arg Val		
370	375	380
Gly Leu Ser Gly Ala Pro Ala Asp Ala Cys Ser Thr Ala Gln Lys Ala		
385	390	395
Val Gly Tyr Ile Cys Lys Cys Asn Gly Gly Arg Gly Ala Ile Arg Glu		
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Phe Ala Glu His Ile Cys Leu Leu Met Glu Lys Val Asn Asn Ser Cys		
420	425	430
Gln Lys		

<210> 5859

<211> 2267

<212> DNA

<213> Homo sapiens

<400> 5859

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120

aaatcacaac ctctcttttg attcccttc acgctaagcc tctttcaaat tcttttctct

180

gagctggaag accagtcaga tgcccgcagg gtcagcgcca agcacattcc caaccgggca
240
actgtgtacc tttctctagg agtgcacgac acccttcccc cacaactcct tgttttaag
300
gatttaaccc attaggaagc ccatgtttca atctaagcca gaaggagctg cgggacaagg
360
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420
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480
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600
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1680
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1740
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1800

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 1860
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 1920
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 1980
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 2160
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<210> 5860

<211> 96

<212> PRT

<213> Homo sapiens

<400> 5860

Met	Glu	Glu	Glu	Ser	Pro	Phe	Thr	Gln	Lys	Lys	Cys	Pro	Leu	Gln	Glu
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Pro	Ala	Ala	Ala	Arg	Gln	Ser	Pro	Ala	Arg	Leu	His	Pro	Lys	Ser	Arg
			20					25					30		
Ser	Arg	Ala	Ser	Glu	Ala	Ser	Gly	Ser	Leu	Leu	Leu	Arg	Phe	Phe	Leu
		35					40					45			
Gln	Met	Gly	Leu	Gly	Arg	Cys	Arg	Phe	Cys	Phe	Ser	Pro	Trp	Leu	Pro
	50					55					60				
Val	Arg	Pro	Gln	Pro	Ser	Gly	Cys	Asp	Ile	Ile	Glu	Ser	Ala	Val	Ser
65					70				75					80	
Pro	Leu	Val	Gly	Asp	Trp	Gly	Ser	Val	Phe	Ser	His	Leu	Tyr	Leu	Leu
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<210> 5861

<211> 1951

<212> DNA

<213> Homo sapiens

<400> 5861

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 120
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 180
 aagctatttg agaaagtcaa agaagtttgt ccaaattgtgc atgagaagat cagagctatt
 240
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 360

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480
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540
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720
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1920
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1951

<210> 5862
 <211> 514
 <212> PRT
 <213> Homo sapiens

<400> 5862
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 35 40 45
 Thr Leu Gln Gln Arg Val Phe Gln Ile Leu Asp Ser Lys Leu Phe Glu
 50 55 60
 Lys Val Lys Glu Val Cys Pro Asn Val His Glu Lys Ile Arg Ala Ile
 65 70 75 80
 Tyr Ala Asp Leu Asn Gln Asn Asp Phe Ala Ile Ser Lys Glu Asp Met
 85 90 95
 Gln Glu Leu Leu Ser Cys Thr Asn Ile Ile Phe His Cys Ala Ala Thr
 100 105 110
 Val Arg Phe Asp Asp Thr Leu Arg His Ala Val Gln Leu Asn Val Thr
 115 120 125
 Ala Thr Arg Gln Leu Leu Leu Met Ala Ser Gln Met Pro Lys Leu Glu
 130 135 140
 Ala Phe Ile His Ile Ser Thr Ala Tyr Ser Asn Cys Asn Leu Lys His
 145 150 155 160
 Ile Asp Glu Val Ile Tyr Pro Cys Pro Val Glu Pro Lys Lys Lys Ile
 165 170 175
 Ile Asp Ser Leu Glu Trp Leu Asp Asp Ala Ile Ile Asp Glu Ile Thr
 180 185 190
 Pro Lys Leu Ile Arg Asp Trp Pro Asn Ile Tyr Thr Tyr Thr Lys Ala
 195 200 205
 Leu Gly Glu Met Val Val Gln Gln Glu Ser Arg Asn Leu Asn Ile Ala
 210 215 220
 Ile Ile Arg Pro Ser Ile Val Gly Ala Thr Trp Gln Glu Pro Phe Pro
 225 230 235 240
 Gly Trp Val Asp Asn Ile Asn Gly Pro Asn Gly Ile Ile Ile Ala Thr
 245 250 255
 Gly Lys Gly Phe Leu Arg Ala Ile Lys Ala Thr Pro Met Ala Val Ala
 260 265 270
 Asp Val Ile Pro Val Asp Thr Val Val Asn Leu Met Leu Ala Val Gly
 275 280 285
 Trp Tyr Thr Ala Val His Arg Pro Lys Ser Thr Leu Val Tyr His Ile
 290 295 300
 Thr Ser Gly Asn Met Asn Pro Cys Asn Trp His Lys Met Gly Val Gln
 305 310 315 320
 Val Leu Ala Thr Phe Glu Lys Ile Pro Phe Glu Arg Pro Phe Arg Arg
 325 330 335
 Pro Asn Ala Asn Phe Thr Ser Asn Ser Phe Thr Ser Gln Tyr Trp Asn
 340 345 350
 Ala Val Ser His Arg Ala Pro Ala Ile Ile Tyr Asp Cys Tyr Leu Arg
 355 360 365
 Leu Thr Gly Arg Lys Pro Arg Met Thr Lys Leu Met Asn Arg Leu Leu

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      370              375              380
Arg Thr Val Ser Met Leu Glu Tyr Phe Ile Asn Arg Ser Trp Glu Trp
385              390              395              400
Ser Thr Tyr Asn Thr Glu Met Leu Met Ser Glu Leu Ser Pro Glu Asp
      405              410              415
Gln Arg Val Phe Asn Phe Asp Val Arg Gln Leu Asn Trp Leu Glu Tyr
      420              425              430
Ile Glu Asn Tyr Val Leu Gly Val Lys Lys Tyr Leu Leu Lys Glu Asp
      435              440              445
Met Ala Gly Ile Pro Lys Ala Lys Gln Arg Leu Lys Arg Leu Arg Asn
      450              455              460
Ile His Tyr Leu Phe Asn Thr Ala Leu Phe Leu Ile Ala Trp Arg Leu
465              470              475              480
Leu Ile Ala Arg Ser Gln Met Ala Arg Asn Val Trp Phe Phe Ile Val
      485              490              495
Ser Phe Cys Tyr Lys Phe Leu Ser Tyr Phe Arg Ala Ser Ser Thr Leu
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Lys Val

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<210> 5863
 <211> 438
 <212> DNA
 <213> Homo sapiens

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<400> 5863
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180
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240
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300
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420
tgaatcagat tttgtaca
438

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<210> 5864
 <211> 104
 <212> PRT
 <213> Homo sapiens

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<400> 5864
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Asp Cys Ser Leu Pro Val Gly Gln Thr His Ser Asn Thr Lys Leu Phe
20          25          30
Cys Gln Tyr Leu Ser Tyr Val Pro Phe Met Ala Glu Tyr Gln Ser Lys

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